

RISE KRISHNA SAI GANDHI GROUP OF INSTITUTIONS:: ONGOLE

Department of Electronics and Communication Engineering



Value Added Course

On

“JAVA Programming ”

Date: 06th to 16th MAY 2019

R Venkata Subbaiah

Associate Professor CSE Department,
Rise Krishna Sai Prakasam Group of Institutions


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VALLURU:: ONGOLE.



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NH-16, Valluru, Ongole, Prakasam (District)-523272
Department of Electronics and Communication Engineering

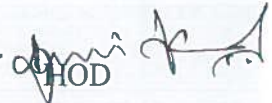
Valluru,
Date: 03-05-2019.

CIRCULAR

There will be a 10 Days Value Added Course on "JAVA Programming" being conducted by the department of ECE in the MPMC Lab from 06-05-2019 to 16-05-2019

All the students of III B.Tech ECE are requested to attend the Value Added Course without fail and make it a grand success.

Copy to:
Principal
Staff Circular
Students of ECE III year
ECE Department Notice Boards

S.N. 
HOD

HEAD OF THE DEPARTMENT
Department of E.C.E
RISE Krishna Sai Gandhi Group
of Institutions, VALLURU, A.P.-523272



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RESUME

R VENKATA SUBBAIAH



Summary

Over 28+ Years Experience in Teaching and conducting various corporate training programs as faculty. Over 20+ years experience in teaching of the following Computer science & engineering subjects and also conducting case studies in various applications and providing technical solutions.

Technical background:

OPERATING SYSTEMS : MS-DOS , SCO UNIX 5.0 , and Linux.

LANGUAGES : C , C++ , VC++ , JAVA , SQL , PL/SQL and DS

TECHNOLOGIES : JDBC, JAVA APPLETS, SERVLETS and JSP,

SCRIPTING LANGUAGES : UNIX scripts, Java Scripts, VB scripts ,HTML, DHTML & CSS (Web Technology)

RDBMS ; ORACLE 8i, MSACCESS and SYBASE 10

GUI Tools ; VB 6.0 / Visual studio 2005

DESIGN TOOLS : AUTO CAD 2000.

OFFICE TOOLS : MS OFFICE and STAR OFFICE

DTP Packages ; PAGEMAKR , POHOTOSHOP

HARDWARE : Capable to Assemble and Trouble shoot the IBM PC's and compatibles


NETWORKING : Capable to setup Small office / Home Office Networks in Linux / Windows NT / 2000 Net work Programming (NP)

Education:

Bachelor Of Engineering in IPE, M.S.Ramaiah Institute Of Technology, Bangalore University, and Passed first class with distinction 72.5%.

Stood 5th (RANK) in the year 1989 in BE from Bangalore University.

M.Tech CSE, Acharya Nagarjuna University with 78% in 2010.


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Work Experience:

- # Worked as a faculty Member in R V College of Engineering, Bangalore, Dept of Industrial Production Engineering, 1989 to 90
- # Worked as a faculty Member in S V P College, Bangalore, Dept of Mechanical Engineering, 1990 to 92
- # Worked as a faculty Member in NIIT Ltd Bangalore. 1992 to 96
- # Worked as a Project Coordinator & faculty Member in NIIT Ltd Ongole. 1996 to 99
- # Worked as a faculty Member in SSI Ltd Ongole. 1999 to 2001
- # Worked as a Sr Lecturer, Computer science GEETHAM DEGREE COLLEGE, Ongole. 2001 to 2010 at same time Owned by RIT Computer & Solutions.
Rit Computers
- # Worked as Associate Professor, CSE Dept , Rao & Naidu Engineering College , Ongole. 2010 to 2012
- # Worked as Associate Professor & HOD, CSE Dept , SSN College of Engineering & Technology , Ongole. 2012 - 2014.
- # At present working as Associate Professor CSE Dept & Technical Trainer, RISE Krishnasai Prakasam Group Of Institutions , Ongole . 2014 to Till now.

Corporate Training programs Undergone:

- # C+QM (Computer and Quality Management) Training at SEED NIIT Basheerbag, Hyderabad.
- # Hand holder's Technical training on MPHS at NIC, Hyderabad.
- # VC++ and Sybase 10 Training at SEED, NEW DELHI.
- #Mission 10X Faculty Empowerment Training Program.
- # Mission 10X Faculty Advanced Training Program.

Work Shops Participated

- #Two Day national level work shop on Data Structure
6th -7th august 2011 Organized by Rao & Naidu Engineering College
- #Mission 10X Faculty Empowerment Training Program.
Dt: 12th sep to 16th 2011 Organized by Wipro


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#System Administration with free software's 28th Sep'2012 , Organized by SSNCST.

#Cyber Security & Malwares Analysis By Andhra Hackers
21st sep 2012 to 22nd sep2012 Organized by Dept of CSE , SSN College of engineering & Technology

#International workshop on BigData & Machine learning
14th to 16th Nov 2014 Organized by RISE Krishnasai Gandhi Group Of Institutions.

One day FDP on "Effective Teaching – Learning Practices in Technical Education"
-A Practical Approach by Dr. Y.V.S.S.V.Prasada Rao ,Principal ,NRI . July 9th 2017.

FDP's Or Workshops Organized :

One day FDP on "Effective Teaching – Learning Practices in Technical Education"
-A Practical Approach by Dr. Y.V.S.S.V.Prasada Rao ,Principal ,NRI . July 9th 2017.

Two Day "PERSONAITY DEVELOPMENT PROGRAMME" for All Btech
Students by Mr. Yandamoori Veerendranath , 12th t 13th July'16

Project Expo 24th sept'16 " SRESTA" As a faculty coordinator.

Projects (Mini Projects useful to Department) :

Student Attendance Project (Java / Web – Technology & MSAccess) .

#Dept Student Marks Entry System (Java , Back-end Excel) .

#RISE Contacts App (Android)

Papers Published :

(IJSTER)

Adaptive Conjection Opportunistic Routing for Wireless Ad-Hoc Networks

ISSN 2319-8885 Vol.06,Issue.22 June-2017, Pages:4340-4343

(IJSTER) **Control Jamming Attacks in Timing Channels using Game Theoretic Model**

ISSN 2319-8885 Vol.06,Issue.05 February-2017, Pages:0892-0894

(IJATIR- INTERNATIONAL JOURNAL OF ADVANCED TECHNOLOGY AND INNOVATIVE RESEARCH)**Privacy Preserving Unified Framework for Owner Authentication Management and Data Confidentiality using PRE and HVE**

ISSN 2348–2370 Vol.08,Issue.17, October-2016, Pages:3308-3310

(IJITR- INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND RESEARCH)

Identification of Frequent Item Search Patterns Using APRIORI Algorithm and WEKA Tool


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Corporate Training Experience:

- # Conducted CARD Training Program for Registration Dept, Prakasam district.
- # Conducted training program in MPHS for Revenue dept, Prakasam district
- # Conducted training session for Erecting of systems and using Genysis software for Election counting and to export the data to election commission INDIA.
- # Conducted training program for TELECOM DOTSOFT in Linux.
- # Conducted training program for APSIDC in Office automation.
- #Resource person for DS (Linked List), National Level Workshop on Advanced Data Structures at RNEC

Additional teaching aids Used

- # Placing solutions in ravinuthalavs.blogspot.com
- # Placing tech solutions in ravinuthalavs.webs.com
- # uploading all important required materials for all B.Tech/IT/MCA students In to Ravinuthalavs.4shared.com
- # Conducting Technical Aptitude classes.
- # Campusconnect (Infosys) Resource person.

Personal Details:

Name : RAVINUTHALA VENKATA SUBBAIAH.
Father Name : Late R. SATYANARAYANA
Date of Birth : 06-05-1966
Nationality : Indian – Hindu
Marital status : Married
Mailing Address : R.Venkata Subbaiah
Hno : 9-2-6
Jamedar Street,
Opp PVR Girls High School
ONGOLE- 523002
Permanent Address : Hno : 9-2-6
Jamedar Street



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Phone : ONGOLE - 523002
9032913835

Email address : ravinuthalavs@yahoo.com
ravinuthalavs@gmail.com

For Solutions : ravinuthalavs.webs.com
ravinuthalavs.blogspot.com

Place :

Date : (R.VENKATA SUBBAIAH)



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Department of Electronics and Communication Engineering

Value Added Course

COURSE : Java - Programming

NO OF PERIODS PLANNED : 60 Class Hrs. Proposed

Course description

The course fully covers the basics of programming in the "JAVA" programming language and demonstrates fundamental programming techniques, customs and vocabulary including the most common libraries.

Learning objectives

- To familiarize the trainee with basic concepts of computer programming and developer tools.
- To present the syntax and semantics of the "JAVA" language as well as data types offered by the language
- To allow the trainee to write their own programs using IDE.

Course outline

- OOP' s Programming paradigm (covers all oops concepts and programming).
- Java Streams, Threads and exception Handling.
- Defining Packages and Applet programming.

S.NO	TOPIC	NO OF CLASS Hrs. PLANNED
1	Introduction : Programming language Types and Paradigms, Computer Programming Hierarchy, How Computer Architecture Affects a Language? , Why Java? Flavors of Java, Java Designing Goal, Role of Java Programmer in Industry, Features of Java Language, JVM –The heart of Java.	4
2	The Java Environment: Installing Java, Java Program Development, Java Source File Structure, Compilation, Executions.	3
3	Basic Language Elements: Lexical Tokens, Identifiers, Keywords, Literals, Comments ,Primitive Data types, Operators Assignments.	3
4	Object Oriented Programming : Class Fundamentals , Object & Object reference , Object Life time & Garbage Collection, Creating and Operating Objects , Constructor & initialization code block, Access Control, Modifiers, methods Nested , Inner Class & Anonymous Classes ,Abstract Class & Interfaces Defining Methods, Argument Passing Mechanism , Method Overloading, Recursion, Dealing with Static Members, Finalize() Method, Native Method. Use of "this " reference, Use of Modifiers with Classes & Methods, Mutator Methods Cloning Objects, Generic Class Types.	10
5	Extending Classes and Inheritance : Use and Benefits of Inheritance in OOP, Types of Inheritance in Java,	7


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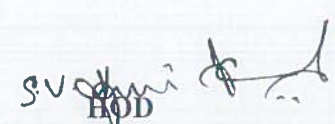
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	Inheriting Data members and Methods , Role of Constructors in inheritance , Overriding Super Class Methods ,Use of “super” , Polymorphism in inheritance ,Type Compatibility and Conversion Implementing interfaces.	
6	Package : Organizing Classes and Interfaces in Packages, Package as Access Protection, Defining Package, CLASSPATH Setting for Packages, Making JAR Files for Library Packages Import and Static Import Naming Convention For Packages.	5
7	Exception Handling: The Idea behind Exception ,Exceptions & Errors ,Types of Exception ,Control Flow In Exceptions, JVM reaction to Exceptions ,Use of try, catch, finally, throw, throws in Exception Handling ,In-built and User Defined Exceptions, Checked and Un-Checked Exceptions.	6
8	Array & String : Defining an Array, Initializing & Accessing Array, Multi –Dimensional Array, Operation on String, Mutable & Immutable String, Using Collection Bases Loop for String, Tokenizing a String, Creating Strings using String Buffer.	3
9	Thread : Understanding Threads, Needs of Multi-Threaded Programming, Thread Life-Cycle, Thread Priorities, Synchronizing Threads, Inter Communication of Threads, Critical Factor in Thread –Deadlock.	6
10	Applet : Applet Application & Parameter passing, Applying thread to applet.	6
11	A Collection of Useful Classes : Utility Methods for Arrays ,Observable and Observer Objects , Date & Times ,Using Scanner Regular Expression, Input/output Operation in Java(java.io Package),Streams and the new I/O Capabilities ,Understanding Streams, The Classes for Input and Output, The Standard Streams, Working with File Object, File I/O Basics, Reading and Writing to Files, Buffer and Buffer Management, Read/Write Operations with File Channel, Serializing Objects	7
Total Hours		60

M. Sandeep
Coordinator


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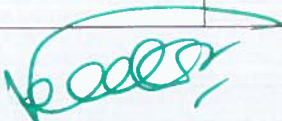
Department of Electronics and Communication Engineering

Value Added Course on "JAVA Programming"

Date: 06th to 16th May 2019

SCHEDULE FROM 06-05-2019 TO 16-05-2019

S. No	Program List	Timing	
		From	To
DAY – 01 (06-05-2019)			
1	Program started	09.10 AM	--
2	Lamp lighting	09.15 AM	09.20 AM
3	Principal speech	09.20 AM	09.35 AM
4	HOD Introduces Resource Person	09.35 AM	09.45 AM
5	Tea Break	09.45 AM	10.00 AM
6	Introduction to JAVA	10.00 AM	01.00 PM
7	Lunch Break	01.00 PM	01.45 PM
8	Programming Language Types and Paradigms, Computer Programming, Hierarchy.	01.45 PM	04.30 PM
DAY – 02 (07-05-2019)			
9	Java Environment: Installing Java, Java Programming Development.	09.15 AM	12.15 PM
10	Lunch Break	12.15 PM	01.15 PM
11	Java Source File Structure Compilation, Execution	01.15 PM	04.15 PM
DAY – 03 (08-05-2019)			
12	Lexical Tokens, Identifiers, Keywords, Literals and Comments	09.15 AM	12.15 PM
13	Lunch Break	12.15 PM	01.15 PM
14	Primitive Datatypes, Operators Assignments	01.15 PM	04.15 PM
DAY – 04 (09-05-2019)			
15	Object Oriented Programming	09.15 AM	12.15 PM
16	Lunch Break	12.15 PM	01.15 PM
17	Recursion, Dealing with Static Members Finalize() Method, Use of Modifiers with Classes & Methods Cloning	01.15 PM	04.15 PM
DAY – 05 (10-05-2019)			
18	Extending Classes and Inheritance	09.15 AM	12.15 PM
19	Lunch Break	12.15 PM	01.15 PM
20	Use of Super polymorphism in inheritance Type Compatibility and conversion	01.15 PM	04.15 PM


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	implementing Interference.		
DAY – 06 (11-05-2019)			
21	Packages : Organizing Classes and Interfaces in packages, package as assess protection and defining package. Class path, Making JAR Files for Library Package	09.15 AM	12.15 PM
22	Lunch Break	12.15 PM	01.15 PM
23	Import and Static Import Naming Convention for packages	01.15 PM	04.15 PM
DAY – 07 (13-05-2019)			
24	Exception Handling : Exceptions & Errors, Types of Exception, Control Flow in Exceptio,JVM reaction to Exceptions,throw, throws in exception handling,In-buit and user defined Expection.	09.15 AM	12.15 PM
25	Lunch Break	12.15 PM	01.15 PM
26	Arrays and String: Defining Arrays, Initializing and Accessing Arrays. Multi-Dimensional Arrays, Operation on string, Mutable, Immutable string, Using collection bases loop for string, Tokenizing a string, Creating string using string buffer	01.15 PM	04.15 PM
DAY – 08 (14-05-2019)			
27	Thread: Understanding Threads, Needs of Multi-Threaded Programming, Thread Life Cycle. Thread Priorities, Synchronizing Threads, Inter Communication of Threads, Tread – Deadlock	09.15 AM	12.15 PM
28	Lunch Break	12.15 PM	01.15 PM
29	Applet: Applet Application, Parameter Passing, Applying Thread to applet	01.15 PM	04.15 PM
DAY – 09 (15-05-2019)			
30	A Collection of Useful Classes: Utility Methods for Arrays, Observable and Observer Objects.Date & Times, Using Scanners Regular Expression	09.15 AM	12.15 PM
31	Lunch Break	12.15 PM	01.15 PM
32	I/O Operation in JAVA	01.15 PM	04.15 PM
DAY – 10 (16-05-2019)			

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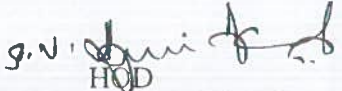
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33	Streams and New I/O Capabilities, Understanding Streams, The Classes for I & O, The Standard Stream, Working with File Object.	09.15 AM	12.15 PM
34	Lunch Break	12.15 PM	01.15 PM
35	File I/O Basics, Reading and Writing of Files, Buffer and Buffer Management, Read/Write Operations for File Channel, Serializing Objects.	01.15 PM	03.45 PM
36	Feedback	03.45 PM	04.00 PM
37	Felicitation to Resource Person and Vote of Thanks	04.00 PM	04.20 PM

M. Sandeep
Coordinator


G. V. Srinivas
HOD
HEAD OF THE DEPARTMENT
Department of E.C.E
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Student Feedback Form

Name of the Student: M. Mounika

Roll No : 168B1A04-26

Topic : VALUE ADDED COURSE on "JAVA Programming"

Date: 16-05-2019

S.No	Feedback Points	5	4	3	2	1
1	Is the course useful or not?	✓				
2	Is the course well planned or not?		✓			
3	Course makes objectives clear?	✓				
4	Course speaker speaks Clearly and audibly?		✓			
5	Lecture explains with exaples clearly?		✓			
6	Is you are doubts clarified or not?	✓				

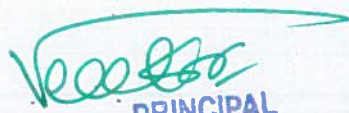
5-Excellent

4-Good

3-Average 2-Poor

1- No comment

M. Mounika
Student Signature


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Student Feedback Form

Name of the Student: *K. Meghana*

Roll No : *168B1A0419*

Topic : VALUE ADDED COURSE on "JAVA Programming"

Date: 16-05-2019

S.No	Feedback Points	5	4	3	2	1
1	Is the course useful or not?	✓				
2	Is the course well planned or not?	✓				
3	Course makes objectives clear?	✓				
4	Course speaker speaks Clearly and audibly?	✓				
5	Lecture explains with examples clearly?	✓				
6	Is your doubts clarified or not?	✓				

5-Excellent

4-Good

3-Average 2-Poor

1- No comment

V. Venkatesh

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Student Feedback Form

Name of the Student: *S. Sasikala*

Roll No : *168B1A0439*

Topic : VALUE ADDED COURSE on "JAVA Programming"

Date: 16-05-2019

S.No	Feedback Points	5	4	3	2	1
1	Is the course useful or not?		✓			
2	Is the course well planned or not?	✓				
3	Course makes objectives clear?	✓				
4	Course speaker speaks Clearly and audibly?		✓			
5	Lecture explains with examples clearly?		✓			
6	Is your doubts clarified or not?		✓			

5-Excellent

4-Good

3-Average 2-Poor

1- No comment

S. Sasikala
Student Signature

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M. Triveni
Student Signature



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Student Feedback Form

Name of the Student: *M. Triveni*

Roll No : *168 B1A0422*

Topic : VALUE ADDED COURSE on "JAVA Programming"

Date: 16-05-2019

S.No	Feedback Points	5	4	3	2	1
1	Is the course useful or not?	✓				
2	Is the course well planned or not?	✓				
3	Course makes objectives clear?		✓			
4	Course speaker speaks Clearly and audibly?		✓			
5	Lecture explains with examples clearly?		✓			
6	Is your doubts clarified or not?	✓				

5-Excellent

4-Good

3-Average 2-Poor

1- No comment

M. Triveni
Student Signature

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VALUE ADDED COURSE FEEDBACK ANALYSIS

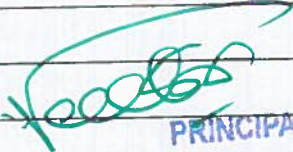
A.Y: 2018-2019

Year : III B.Tech ECE

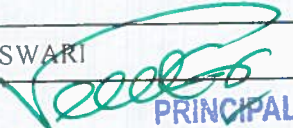
Date: 16-05-2019

Name of the Value Added Course : JAVA Programming

S.No	Roll Number	Name	1	2	3	4	5	6
1	168B1A0401	ANNABATHINA PAVANI	4	5	4	5	5	5
2	168B1A0402	ARE DIVYA	4	4	5	4	4	4
3	168B1A0403	AVULA AMULYA	5	5	5	4	4	5
4	168B1A0404	BATHULA LALITHA	4	4	5	4	5	5
5	168B1A0405	BELLAM JHANSI	4	4	5	4	4	5
6	168B1A0406	BHOGYAM SADHANA	4	4	4	4	5	5
7	168B1A0407	BHUMA JANAVIPRIYA	4	5	5	4	5	4
8	168B1A0408	BHUPATHI LAKSHMITRIVENI	4	4	5	4	5	5
9	168B1A0409	DRONADULA MOUNIKA	4	5	5	4	5	5
10	168B1A0410	DUMPA ANUSHA	5	4	5	4	5	5
11	168B1A0411	ELIKA LAKSHMI MANISHA	5	4	5	4	5	4
12	168B1A0412	GADDAM NAGADIVYA	4	5	4	5	5	4
13	168B1A0413	KAKARLA LAXMI PRASANNA	4	4	5	5	5	5
14	168B1A0414	KAKARLA MADHAVI	5	5	5	5	5	5
15	168B1A0415	KAKARLA PRAVALLIKA	4	5	4	5	5	5
16	168B1A0416	KALLAM YAMUNA	4	4	5	4	5	4
17	168B1A0417	KANUMURI RANJITHA	4	4	5	4	4	5


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S.No	Roll Number	Name	1	2	3	4	5	6
18	168B1A0418	KASUKURTHI KALYANI	5	4	4	4	4	5
19	168B1A0419	KATRAGADDA MEGHANA	5	5	5	5	5	5
20	168B1A0420	KODE SOWMYA	5	4	5	4	4	5
21	168B1A0421	KOTHAPALLI TEJASWINI	5	4	5	5	5	4
22	168B1A0422	MADDA THRIVENI	5	5	4	4	4	5
23	168B1A0423	MALLEPULA PRASANNA	5	5	4	4	4	5
24	168B1A0424	MEDIDA PRIYANKA	5	5	4	5	4	5
25	168B1A0425	MEDIKONDA AKHILA	5	4	5	4	5	5
26	168B1A0426	MENDA MOUNIKA	5	4	5	4	4	5
27	168B1A0427	NANNAM USHA RANI	5	4	5	5	5	4
28	168B1A0428	NELAKURTHI PRASANNA	5	5	5	5	5	5
29	168B1A0429	NERELLA VEERA VENKATA DHANASRI	4	5	4	5	4	5
30	168B1A0430	PADMANABHUNI GOVINDAMBICA	5	4	4	4	5	5
31	168B1A0431	PALADUGU SINDHUJA	5	5	5	5	5	5
32	168B1A0432	PATCHIPULUSU DIVYA	4	4	5	5	4	4
33	168B1A0433	POGULA ANUPAMA	5	4	5	4	5	5
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36	168B1A0436	PURNAGANTI PAVANI	5	4	5	4	4	4
37	168B1A0437	SEELAM VENKATA RAJESWARI	5	5	5	4	4	5


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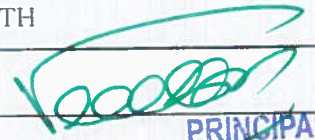
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47	168B1A0447	ARLAGADDA PRAVEEN	5	4	5	5	5	5
48	168B1A0448	DUTHALURI MAJNU	5	4	5	5	4	4
49	168B1A0449	IRAGALA SIVAKUMAR REDDY	4	5	4	4	4	5
50	168B1A0450	JAMPANI VENKATA NARASA RAJU	5	4	4	4	5	5
51	168B1A0451	KUMMITHA ANILKUMAR REDDY	5	4	5	5	5	4
52	168B1A0453	SYED SADIQ	5	5	5	4	4	5
53	168B1A0454	THADAVARTHI PURNA PRASANTH	5	4	4	4	4	5
54	168B1A0455	THUMU VISHNU VARDHAN REDDY	4	5	5	5	4	5
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57	168B1A0460	BODDAPATI LAKSHMI	5	5	5	4	5	5


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S.No	Roll Number	Name	1	2	3	4	5	6
58	168B1A0461	BODDU MAHESWARI	5	5	5	5	5	5
59	168B1A0462	BODDULURI SAI SRI PRIYA	5	5	5	4	5	5
60	168B1A0463	BOGGAVARAPU SRAVANI	5	4	5	4	5	5
61	168B1A0464	BOMMISSETTY SUSRITHA	5	4	5	4	5	5
62	168B1A0465	DARNASI RAJINI	5	4	5	4	5	5
63	168B1A0467	GONGATI KARISHMA	5	4	4	4	5	5
64	168B1A0468	JAMMALAMADUGU SPANDANA	5	5	5	4	5	5
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66	168B1A0471	KADIYALA PAVITHRA	5	5	5	4	5	5
67	168B1A0472	KANASANI SRAVANI	5	4	4	4	5	5
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69	168B1A0474	KANCHARLA VENKATA KEERTHI	5	4	5	4	5	5
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71	168B1A0477	KONDA SUMANJALI	5	4	4	4	4	5
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74	168B1A0480	LAKKENABOINA ASHA KIRAN	4	5	5	5	4	5
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76	168B1A0482	MACHAVARAPU SUJITHA	5	5	5	4	5	4
77	168B1A0483	MALADI VASU PRIYA	5	4	5	5	5	4


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S.No	Roll Number	Name	1	2	3	4	5	6
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79	168B1A0485	MANE SOWMYA	4	5	5	5	5	5
80	168B1A0487	MUDAMALA VAISNAVI	5	4	5	5	4	4
81	168B1A0488	NELAKURI RATNA SUDHA	4	5	4	4	4	5
82	168B1A0489	PABOLU ALEKHYA	5	5	5	5	5	5
83	168B1A0490	POLISSETTY VENKATA BINDHU LATHA	4	4	5	4	4	4
84	168B1A0491	PULICHERLA BHAVANA	5	4	5	5	5	4
85	168B1A0492	PUNNEPALLI SRAVANTHI	5	5	5	4	4	5
86	168B1A0493	SANDEPOGU MARY	5	5	5	5	5	5
87	168B1A0494	SOMEPELLI GOWRI	4	4	5	5	4	5
88	168B1A0495	SYED TAMEEM	4	5	5	4	5	4
89	168B1A0496	THORATI ROSEMARY	5	4	5	5	5	4
90	168B1A0497	THOTAKURA VANI PRIYANKA	4	5	5	4	5	5
91	168B1A0498	YENDLURI SUSHMA	5	5	5	4	5	5
92	168B1A0499	BADE RAJA SEKHARA REDDY	4	4	5	5	4	5
93	168B1A04A1	DORADLA VENKATA NAVEEN	4	5	5	4	5	4
94	168B1A04A2	GADDE MARUTHI	5	5	4	5	5	5
95	168B1A04A3	GOKANAKONDA VINEETH	4	5	5	4	5	5
96	168B1A04A4	KANDULA SAI TEJA	5	5	5	4	5	5



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S.No	Roll Number	Name	1	2	3	4	5	6
97	168B1A04A5	KOTHAPALLI SARATH CHANDRA	4	5	5	5	5	5
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99	168B1A04A7	MUVVA RAMALINGA REDDY	4	5	4	4	4	5
100	168B1A04A8	NALLAMALLI HARICHANDAN	5	4	4	4	5	5
101	168B1A04A9	PULURI BRAHMA REDDY	5	4	5	5	5	4
102	168B1A04B1	SATHULURI SAI VAMSI	5	5	5	4	4	5
103	168B1A04B3	SYED SADIQ	5	5	5	5	5	5
104	168B1A04B5	YENIKAPATI VENKATA ARAVIND	4	5	5	5	4	5
105	158B1A0454	MALLELA RAGHAVENDRA	4	5	5	4	5	4
			4.66	4.50	4.75	4.42	4.67	4.74
			93.14	90.00	95.00	88.33	93.33	94.79

M. S. Sundeep
Coordinator



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S.V. Srinivas
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(Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada)

NH-16, Valluru, Ongole, Prakasam (District)-523272

Department of Electronics and Communication Engineering

Certificate program Feedback Analysis

Topic : Value Added Course on" JAVA Programming"
Resource Person : **R.Venkata Subhaiah.**
Associate Professor- CSE Department, RPRA
Dates : 06-05-2019 to 16-05-2019
Venue : MPMC Lab
Targeted Students : III Year students

S.No	No. of students Participated	No. of students given feedback	Feedback %
1	105	105	100%

M. Sandeep
Coordinator

g. v. s. s. s.
Head of the Department

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of Institutions, VALLURU, A.P.-523 272

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**Value Added Course on
“JAVA Programming”**

From 06-05-2019 to 16-05-2019

Department of ECE

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ABOUT JAVA

Java programming language was originally developed by Sun Microsystems which was initiated by James Gosling and released in 1995 as core component of Sun Microsystems' Java platform (Java 1.0 [J2SE]).

The latest release of the Java Standard Edition is Java SE 8. With the advancement of Java and its widespread popularity, multiple configurations were built to suit various types of platforms. For example: J2EE for Enterprise Applications, J2ME for Mobile Applications.

Java is a general-purpose, class-based, object-oriented programming language designed for having lesser implementation dependencies. It is a computing platform for application development. Java is fast, secure, and reliable, therefore. It is widely used for developing Java applications in laptops, data centers, game consoles, scientific supercomputers, cell phones, etc.

Java Platform is a collection of programs that help programmers to develop and run Java programming applications efficiently. It includes an execution engine, a compiler, and a set of libraries in it. It is a set of computer software and specifications.

The new J2 versions were renamed as Java SE, Java EE, and Java ME respectively. Java is guaranteed to be **Write Once, Run Anywhere**.

Java is –

Object Oriented – In Java, everything is an Object. Java can be easily extended since it is based on the Object model.

Platform Independent – Unlike many other programming languages including C and C++, when Java is compiled, it is not compiled into platform specific machine, rather into platform independent byte code. This byte code is distributed over the web and interpreted by the Virtual Machine (JVM) on whichever platform it is being run on.

Simple – Java is designed to be easy to learn. If you understand the basic concept of OOP Java, it would be easy to master.

Secure – With Java's secure feature it enables to develop virus-free, tamper-free systems. Authentication techniques are based on public-key encryption.

Architecture-neutral – Java compiler generates an architecture-neutral object file format, which makes the compiled code executable on many processors, with the presence of Java runtime system.

Portable – Being architecture-neutral and having no implementation dependent aspects of the specification makes Java portable. Compiler in Java is written in ANSI C with a clean portability boundary, which is a POSIX subset.

Robust – Java makes an effort to eliminate error prone situations by emphasizing mainly on compile time error checking and runtime checking.

Multithreaded – With Java's multithreaded feature it is possible to write programs that can perform many tasks simultaneously. This design feature allows the developers to construct interactive applications that can run smoothly.



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Interpreted – Java byte code is translated on the fly to native machine instructions and is not stored anywhere. The development process is more rapid and analytical since the linking is an incremental and light-weight process.

High Performance – With the use of Just-In-Time compilers, Java enables high performance.

Distributed – Java is designed for the distributed environment of the internet.

Dynamic – Java is considered to be more dynamic than C or C++ since it is designed to adapt to an evolving environment. Java programs can carry extensive amount of run-time information that can be used to verify and resolve accesses to objects on run-time.

Java Features

Here are some important Java features:

- It is one of the easy-to-use programming languages to learn.
- Write code once and run it on almost any computing platform.
- Java is platform-independent. Some programs developed in one machine can be executed in another machine.
- It is designed for building object-oriented applications.
- It is a multi threaded language with automatic memory management.
- It is created for the distributed environment of the Internet.
- Facilitates distributed computing as its network-centric.

Different Types of Java Platforms

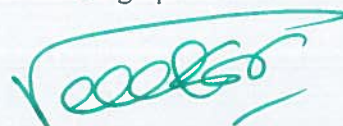
There are four different types of Java programming language platforms:

1. Java Platform, Standard Edition (Java SE): Java SE's API offers the Java programming language's core functionality. It defines all the basis of type and object to high-level classes. It is used for networking, security, database access, graphical user interface (GUI) development, and XML parsing.

2. Java Platform, Enterprise Edition (Java EE): The Java EE platform offers an API and runtime environment for developing and running highly scalable, large-scale, multi-tiered, reliable, and secure network applications.

3. Java Programming Language Platform, Micro Edition (Java ME): The Java ME platform offers an API and a small-footprint virtual machine running Java programming language applications on small devices, like mobile phones.

4. Java FX: Java FX is a platform for developing rich internet applications using a lightweight user-interface API. It user hardware-accelerated graphics and media engines that



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help Java take advantage of higher-performance clients and a modern look-and-feel and high-level APIs for connecting to networked data sources.

Value Added Course

COURSE : Java - Programming

NO OF PERIODS PLANNED: 60 Class Hrs. Proposed

Course description

The course fully covers the basics of programming in the “JAVA” programming language and demonstrates fundamental programming techniques, customs and vocabulary including the most common libraries.

Learning objectives

- To familiarize the trainee with basic concepts of computer programming and developer tools.
- To present the syntax and semantics of the “JAVA” language as well as data types offered by the language
- To allow the trainee to write their own programs using IDE.

Course outline

- OOP’s Programming paradigm (covers all oops concepts and programming).
- Java Streams, Threads and exception Handling.
- Defining Packages and Applet programming.

S.NO	TOPIC	NO OF CLASS Hrs. PLANNED
1	Introduction : Programming language Types and Paradigms, Computer Programming Hierarchy, How Computer Architecture Affects a Language? , Why Java? Flavors of Java, Java Designing Goal, Role of Java Programmer in Industry, Features of Java Language, JVM –The heart of Java.	4
2	The Java Environment: Installing Java, Java Program Development, Java Source File Structure, Compilation, Executions.	3
3	Basic Language Elements: Lexical Tokens, Identifiers, Keywords, Literals, Comments ,Primitive Data types, Operators Assignments.	3
4	Object Oriented Programming : Class Fundamentals , Object & Object reference , Object Life time & Garbage Collection, Creating and Operating Objects , Constructor & initialization code block, Access Control, Modifiers, methods Nested , Inner Class & Anonymous Classes ,Abstract Class & Interfaces Defining Methods, Argument Passing Mechanism , Method Overloading, Recursion, Dealing with Static Members, Finalize() Method, Native Method. Use of “this “ reference, Use of Modifiers with Classes & Methods, Mutator Methods Cloning Objects, Generic Class Types.	10


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5	Extending Classes and Inheritance : Use and Benefits of Inheritance in OOP, Types of Inheritance in Java, Inheriting Data members and Methods , Role of Constructors in inheritance , Overriding Super Class Methods ,Use of "super" , Polymorphism in inheritance ,Type Compatibility and Conversion Implementing interfaces.	7
6	Package : Organizing Classes and Interfaces in Packages, Package as Access Protection, Defining Package, CLASSPATH Setting for Packages, Making JAR Files for Library Packages Import and Static Import Naming Convention For Packages.	5
7	Exception Handling: The Idea behind Exception ,Exceptions & Errors ,Types of Exception ,Control Flow In Exceptions, JVM reaction to Exceptions ,Use of try, catch, finally, throw, throws in Exception Handling ,In-built and User Defined Exceptions, Checked and Un-Checked Exceptions.	6
8	Array & String : Defining an Array, Initializing & Accessing Array, Multi -Dimensional Array, Operation on String, Mutable & Immutable String, Using Collection Bases Loop for String, Tokenizing a String, Creating Strings using String Buffer.	3
9	Thread : Understanding Threads, Needs of Multi-Threaded Programming, Thread Life-Cycle, Thread Priorities, Synchronizing Threads, Inter Communication of Threads, Critical Factor in Thread -Deadlock.	6
10	Applet : Applet Application & Parameter passing, Applying thread to applet.	6
11	A Collection of Useful Classes : Utility Methods for Arrays ,Observable and Observer Objects , Date & Times ,Using Scanner Regular Expression, Input/output Operation in Java(java.io Package),Streams and the new I/O Capabilities ,Understanding Streams, The Classes for Input and Output, The Standard Streams, Working with File Object, File I/O Basics, Reading and Writing to Files, Buffer and Buffer Management, Read/Write Operations with File Channel, Serializing Objects .	7
Total Hours		60


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JAVA Programming Modules:

When we consider a Java program, it can be defined as a collection of objects that communicate via invoking each other's.

Object – Objects have states and behaviors. Example: A dog has states - color, name, breed as well as behavior such as wagging their tail, barking, eating. An object is an instance of a class.

Class – A class can be defined as a template/blueprint that describes the behavior/state that the object of its type supports.

Methods – A method is basically a behavior. A class can contain many methods. It is in methods where the logics are written, data is manipulated and all the actions are executed.

Instance Variables – Each object has its unique set of instance variables. An object's state is created by the values assigned to these instance variables.

First Java Program

Let us look at a simple code that will print the words *Hello World*.

```
public class MyFirstJavaProgram {  
    /* This is my first java program.  
    * This will print 'Hello World' as the output  
    */  
    public static void main(String []args) {  
        System.out.println("Hello World"); // prints Hello World  
    }  
}
```

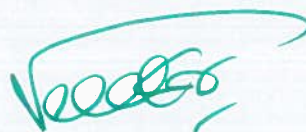
Output:

```
C:\> javac MyFirstJavaProgram.java  
C:\> java MyFirstJavaProgram  
Hello World
```

Basic Syntax

About Java programs, it is very important to keep in mind the following points.

Case Sensitivity – Java is case sensitive, which means identifier **Hello** and **hello** would have different meaning in Java.



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Class Names – For all class names the first letter should be in Upper Case. If several words are used to form a name of the class, each inner word's first letter should be in Upper Case.

Example: *class MyFirstJavaClass*

Method Names – All method names should start with a Lower Case letter. If several words are used to form the name of the method, then each inner word's first letter should be in Upper Case.

Example: *public void myMethodName()*

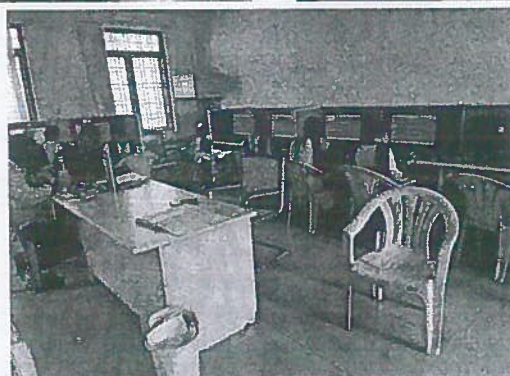
Program File Name – Name of the program file should exactly match the class name.

When saving the file, you should save it using the class name (Remember Java is case sensitive) and append '.java' to the end of the name (if the file name and the class name do not match, your program will not compile).

But please make a note that in case you do not have a public class present in the file then file name can be different than class name. It is also not mandatory to have a public class in the file.

Example: Assume 'MyFirstJavaProgram' is the class name. Then the file should be saved as '*MyFirstJavaProgram.java*'

public static void main(String args[]) – Java program processing starts from the main() method which is a mandatory part of every Java program.



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Java Identifiers

All Java components require names. Names used for classes, variables, and methods are called **identifiers**.

In Java, there are several points to remember about identifiers. They are as follows –

- All identifiers should begin with a letter (A to Z or a to z), currency character (\$) or an underscore (_).
- After the first character, identifiers can have any combination of characters.
- A key word cannot be used as an identifier.
- Most importantly, identifiers are case sensitive.
- Examples of legal identifiers: age, \$salary, _value, __1_value.
- Examples of illegal identifiers: 123abc, -salary.

Java Modifiers

Like other languages, it is possible to modify classes, methods, etc., by using modifiers. There are two categories of modifiers –

Access Modifiers – default, public, protected, private

Non-access Modifiers – final, abstract, strictfp

We will be looking into more details about modifiers in the next section.

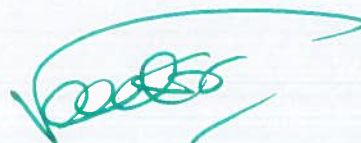
Java Variables

Following are the types of variables in Java

- Local Variables
- Class Variables (Static Variables)
- Instance Variables (Non-static Variables)

Java Arrays

Arrays are objects that store multiple variables of the same type. However, an array itself is an object on the heap. We will look into how to declare, construct, and initialize in the upcoming chapters.



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Java Multi-threading:

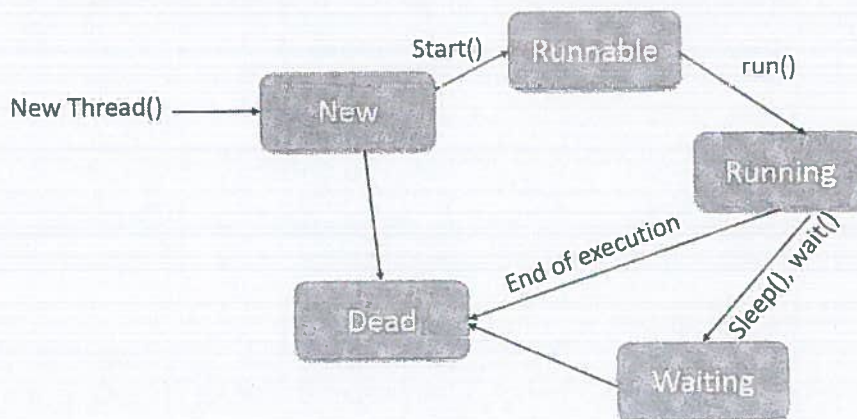
Java is a *multi-threaded programming language* which means we can develop multi-threaded program using Java. A multi-threaded program contains two or more parts that can run concurrently and each part can handle a different task at the same time making optimal use of the available resources specially when your computer has multiple CPUs.

By definition, multitasking is when multiple processes share common processing resources such as a CPU. Multi-threading extends the idea of multitasking into applications where you can subdivide specific operations within a single application into individual threads. Each of the threads can run in parallel. The OS divides processing time not only among different applications, but also among each thread within an application.

Multi-threading enables you to write in a way where multiple activities can proceed concurrently in the same program.

Life Cycle of a Thread

A thread goes through various stages in its life cycle. For example, a thread is born, started, runs, and then dies. The following diagram shows the complete life cycle of a thread.



Following are the stages of the life cycle –

New – A new thread begins its life cycle in the new state. It remains in this state until the program starts the thread. It is also referred to as a **born thread**.

Runnable – After a newly born thread is started, the thread becomes runnable. A thread in this state is considered to be executing its task.

Waiting – Sometimes, a thread transitions to the waiting state while the thread waits for another thread to perform a task. A thread transitions back to the runnable state only when another thread signals the waiting thread to continue executing.

Timed Waiting – A runnable thread can enter the timed waiting state for a specified interval of time. A thread in this state transitions back to the runnable state when that time interval expires or when the event it is waiting for occurs.

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Terminated (Dead) – A runnable thread enters the terminated state when it completes its task or otherwise terminates.

Java Array :

Java provides a data structure, the **array**, which stores a fixed-size sequential collection of elements of the same type. An array is used to store a collection of data, but it is often more useful to think of an array as a collection of variables of the same type.

Declaring Array Variables

To use an array in a program, you must declare a variable to reference the array, and you must specify the type of array the variable can reference. Here is the syntax for declaring an array variable –

Syntax

```
dataType[] arrayRefVar; // preferred way.  
or  
dataType arrayRefVar[]; // works but not preferred way.
```

Note – The style **dataType[] arrayRefVar** is preferred. The style **dataType arrayRefVar[]** comes from the C/C++ language and was adopted in Java to accommodate C/C++ programmers.

Example

The following code snippets are examples of this syntax –

```
double[] myList; // preferred way. or double myList[]; // works but not preferred way.
```

Creating Arrays

You can create an array by using the new operator with the following syntax –

Syntax

```
arrayRefVar = new dataType[arraySize];
```

The above statement does two things –

- It creates an array using new dataType[arraySize].
- It assigns the reference of the newly created array to the variable arrayRefVar.

Declaring an array variable, creating an array, and assigning the reference of the array to the variable can be combined in one statement, as shown below –

```
dataType[] arrayRefVar = new dataType[arraySize];
```

Alternatively you can create arrays as follows –



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dataType[] arrayRefVar = {value0, value1, ..., valuek};

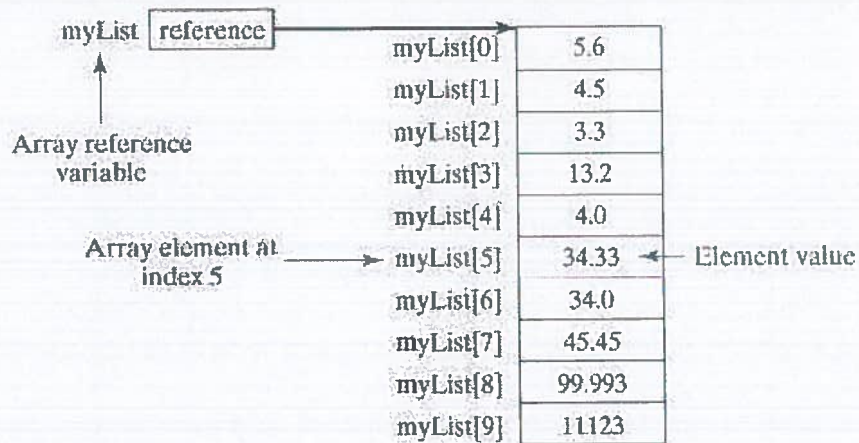
The array elements are accessed through the **index**. Array indices are 0-based; that is, they start from 0 to **arrayRefVar.length-1**.

Example

Following statement declares an array variable, myList, creates an array of 10 elements of double type and assigns its reference to myList –

```
double[] myList = new double[10];
```

Following picture represents array myList. Here, myList holds ten double values and the indices are from 0 to 9.



Example

Here is a complete example showing how to create, initialize, and process arrays –

[Live Demo](#)

```
public class TestArray {  
  
    public static void main(String[] args) {  
        double[] myList = {1.9, 2.9, 3.4, 3.5};  
  
        // Print all the array elements  
        for (int i = 0; i < myList.length; i++) {  
            System.out.println(myList[i] + " ");  
        }  
  
        // Summing all elements  
        double total = 0;  
        for (int i = 0; i < myList.length; i++) {  
            total += myList[i];  
        }  
    }  
}
```


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```
}
System.out.println("Total is " + total);

// Finding the largest element
double max = myList[0];
for (int i = 1; i < myList.length; i++) {
    if (myList[i] > max) max = myList[i];
}
System.out.println("Max is " + max);
}}
```

This will produce the following result –

Output

```
1.9
2.9
3.4
3.5
Total is 11.7
Max is 3.5
```

Creating Strings

The most direct way to create a string is to write –

```
String greeting = "Hello world!";
```

Whenever it encounters a string literal in your code, the compiler creates a String object with its value in this case, "Hello world!".

As with any other object, you can create String objects by using the new keyword and a constructor. The String class has 11 constructors that allow you to provide the initial value of the string using different sources, such as an array of characters.

Example

```
public class StringDemo {

    public static void main(String args[]) {
        char[] helloArray = { 'h', 'e', 'l', 'l', 'o', '!' };
        String helloString = new String(helloArray);
        System.out.println( helloString );
    }
}
```

This will produce the following result –

Output

Hello

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Java Classes :

The collections framework was designed to meet several goals, such as –

- The framework had to be high-performance. The implementations for the fundamental collections (dynamic arrays, linked lists, trees, and hashtables) were to be highly efficient.
- The framework had to allow different types of collections to work in a similar manner and with a high degree of interoperability.
- The framework had to extend and/or adapt a collection easily.

Towards this end, the entire collections framework is designed around a set of standard interfaces. Several standard implementations such as **LinkedList**, **HashSet**, and **TreeSet**, of these interfaces are provided that you may use as-is and you may also implement your own collection, if you choose.

A collections framework is a unified architecture for representing and manipulating collections. All collections frameworks contain the following –

Interfaces – These are abstract data types that represent collections. Interfaces allow collections to be manipulated independently of the details of their representation. In object-oriented languages, interfaces generally form a hierarchy.

Implementations, i.e., Classes – These are the concrete implementations of the collection interfaces. In essence, they are reusable data structures.

Algorithms – These are the methods that perform useful computations, such as searching and sorting, on objects that implement collection interfaces. The algorithms are said to be polymorphic: that is, the same method can be used on many different implementations of the appropriate collection interface.

Conclusion:

The Value added course on “JAVA Programming” as per the designed syllabus, all topics are covered and students benefited to their extent.



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Department of Electronics and Communication Engineering

Date: 16-05-2019.

CLOSING REPORT

To,
The Principal,
RISE Krishna Sai Gandhi Group of Institutions.

As per the approved schedule, the ECE department has conducted a Value Added Course on “**JAVA Programming**” at ECE Seminar hall from 06-05-2019 to 16-05-2019. 105 students of III ECE have participated in this program R.Venkata Subbaiah acted as the resource person for this program.

Main issues addressed:

1. JAVA Introduction.
2. Why JAVA?
3. Basic Language Elements
 - Identifiers, Keywords, Literals, Comments.
4. Object Oriented Programming
 - Class Fundamentals, Object & Object reference , Object Life time & Garbage Collection, Creating and Operating Objects.
5. Threads
 - Understanding Threads , Needs of Multi-Threaded Programming ,Thread Life-Cycle.
6. A Collection of Useful Classes
 - Utility Methods for Arrays ,Observable and Observer Objects , Date & Times, Using Scanner Regular Expression, Input/Output Operation in Java(java.io Package)

We are expecting your support in future also. Thanking you sir,

Yours faithfully,

M. sandeep
Coordinator

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HOD

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