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Dr. Babasaheb
Ambedkar Open
University

PGDMAD-101

Mobile Operating Systems

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PGDMAD-104

Software Lab for Introduction to Java

Java Lab Manual

Unit Structure

- 1.1 Learning Objectives
- 1.2 Introduction
- 1.3 Requirement Specification
- 1.4 Create Your First Java Program
- 1.5 List of Practical
- 1.6 List of Lab Assignments
- 1.7 Further Reading

Course Name: Software Lab For Introduction to Java

Course Code: PGDMAD-104

- 1) Write a JAVA program to implement concept of scanner class to get roll number and name of the student through keyboard and display them as output.
- 2) Write a JAVA program to implement various Arithmetic Operators.
- 3) Write a JAVA program to check whether given number is even or odd.
- 4) Write a JAVA program to find largest number among three numbers.
- 5) Write a JAVA program to wish “good morning”, “good afternoon”, “good evening” or “good night” from current time using if...else ladder.
- 6) Write a JAVA program which reads two integers and perform the arithmetic operation on them based on user’s choice using “switch...case” statement.
- 7) Write a JAVA program to find factorial of given number using for and while loop.
- 8) Write a JAVA program to create following pattern using nesting of loop.
- 9) Write a JAVA program to implement break and continue statements.
- 10) Write a JAVA program to implement labeled continue and break statements.
- 11) Write a JAVA program to sort 5 integers in ascending order using array.
- 12) Write a JAVA program to add two 3x3 matrix.
- 13) Write a JAVA program to implement simple java class which includes methods to get student information and print the details on screen.
- 14) Write a JAVA program to implement default and parameterized constructor in java.
- 15) Write a JAVA program to implement “this” keyword.
- 16) Write a JAVA program to implement concept of method overloading.
- 17) Write a JAVA program which use static variable to count number of object of class created using.
- 18) Write a JAVA program to implement static method.
- 19) Write a JAVA program to implement concept of nesting of methods.
- 20) Write a JAVA program to implement concept of vector class.
- 21) Write a JAVA program to implement concept of unboxing classes.
- 22) Write a JAVA program to implement concept of Wrapper classes and its methods.
- 23) Write a JAVA program which converts one numeric datatype to other type.

- 24) Write a JAVA program which converts String to primitive data type.
- 25) Write a JAVA program to convert wrapper class object into String.
- 26) Write A JAVA program to implement single inheritance.
- 27) Write a JAVA program to implement concept of super keyword.
- 28) Write A JAVA program to implement Hierarchical inheritance.
- 29) Write A JAVA program to implement concept of method overriding.
- 30) Write A JAVA program to implement concept of final variable.
- 31) Write a JAVA program to implement concept of Abstract class.
- 32) Write A JAVA program to implement interface.
- 33) Write a JAVA program to implement concept of object as function argument.
- 34) Write a JAVA program to implement concept of function return object.
- 35) Write a JAVA program to find a factorial of given number using recursion.
- 36) Write a JAVA program to implement methods of string class.
- 37) Write a JAVA program to implement methods of stringBuffer class.
- 38) Create a JAVA program to implement concept of command line argument.
- 39) Create a JAVA program to implement generic class.
- 40) Steps to create simple package.
- 41) Create a package name fruit. In this package create classes named Apple, Grape and Banana with appropriate attributes and methods in them. Compile the java files and create the classes in package fruit. Now prepare jar file containing this package. Put this jar file in class path. Create a java program outside this package which is using this package by importing it. Also create object of each class and call methods in main method. Use appropriate access modifier while creating classes.
- 42) Write a JAVA program to print "Hello World " using ArrayList.
- 43) Write a java program to implement simple LinkedList.
- 44) Write a JAVA program to implement stack.
- 45) Implement a JAVA program to show various operation of queue.
- 46) Write a JAVA program to implement HashSet.
- 47) Write a JAVA program to implement LinkedHashSet.
- 48) Write a JAVA program to implement TreeSet.

- 49) Write a JAVA program to implement Exception Handling.
- 50) Write a JAVA program to implement throw keyword to explicitly raise an exception.
- 51) Write a JAVA program to implement user defined exception
- 52) Write a JAVA program to implement chained exception.
- 53) Write a JAVA program to working with Button Control in AWT.
- 54) Write a JAVA program to working with Label Control in AWT.
- 55) Write a JAVA program to working with Checkbox Control in AWT.
- 56) Write a JAVA program to working with CheckboxGroup Control in AWT.
- 57) Write a java program to working with Choice Control in AWT.
- 58) Write a JAVA program to working with TextField Control in AWT.
- 59) Write a JAVA program to working with TextArea Control in AWT.
- 60) Write a JAVA program to working with Scrollbar Control in AWT.
- 61) Write a JAVA program to working with List Control in AWT.
- 62) Write a JAVA program to working with Menu in AWT.
- 63) Write a JAVA program to working with Canvas in AWT.
- 64) Write a JAVA program to working with Panel in AWT.
- 65) Write a program to implement all the window event methods.
- 66) Write a program to implement all the key event methods.
- 67) Write a program to implement adapter classes.
- 68) Write a JAVA program to implements methods of the Graphics class.
- 69) Write a java program to implement Font class and methods.
- 70) Write a java program depicts the use of Border Layout.
- 71) Write a JAVA program depicts the use of Grid Layout.
- 72) Write a JAVA program depicts the use of Card Layout.
- 73) Write a JAVA program depicts the use of GridBag Layout.
- 74) Write a JAVA program depicts the use of Setbound().
- 75) Write a JAVA Program to write a String and character array using OutputStreamWriter and reading back the same file using InputStreamReader.
- 76) Write a JAVA Program to writes a data in a file using BufferedWriter and reads the content back from the same file using BufferedReader.

- 77) Write a JAVA program in which one thread takes off the behavior of scores for 10 members by generating random numbers between 0 to 10. Another thread keeps track of the total votes per members using PipedWriter and PipedReader class.
- 78) Write a java program to write to and read from the file using FileInputStream and FileOutputStream .
- 79) Write a JAVA program to write to and read from the file using DataOutputStream and DataInputStream.
- 80) Write a JAVA program to implement File handling using File class.
- 81) Write a java program to implement console class.
- 82) Write a JAVA program which prints even numbers after every one second interval using thread class.
- 83) Write a JAVA program to implement Runnable interface.
- 84) Write a JAVA program to set priority of thread.
- 85) Write a JAVA program to control access of resource using wait() and notify () methods.



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PGMAD-105

**Software Lab for
Android Mobile Application Development**

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PGDMAD-201

Advanced Android Mobile Application

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Cross Platform Mobile Application Development

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Software Lab for Advanced Android Mobile Application Development

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