

**LJ Polytechnic, Ahmedabad**  
**COMPUTER ENGINEERING / INFORMATION TECHNOLOGY - SEMESTER 5**  
**JAVA PROGRAMMING [3350703]**  
**PRACTICAL LIST**

**Java Programming Practical List**

1	Install JDK, write a simple "Hello World" or similar java program, compilation, debugging, executing using java compiler and interpreter.
2	Write a program in Java to generate up to n prime numbers.
3	Write a program in Java to find maximum of three numbers using conditional operator.
4	Write a program in Java to reverse the digits of a number using while loop.
5	Write programs in Java to use Wrapper class of each primitive data types.
6	Write a program in Java to multiply two matrix.
7	Write a static block which will be executed before main( ) method in a class.
8	Write a program in Java to demonstrate use of <b>this</b> keyword. Check whether <b>this</b> can access the private members of the class or not.
9	Write a program in Java to develop overloaded constructor. Also develop the copy constructor to create a new object with the state of the existing object.
10	Write a program in Java to demonstrate the use of private constructor and also write a method which will count the number of instances created using default constructor only.
11	Create swap class and swap the value using passing argument by references.
12	Write a java program that pass the object as argument and return the object.
13	Write a java program for find factorial using recursion.
14	Write a program in Java to demonstrate single inheritance, multilevel inheritance and hierarchical inheritance.
15	Write a program in Java in which a subclass constructor invokes the constructor of the super class and instantiate the values.
16	Write a program in Java to demonstrate the use of 'final' keyword in the field declaration. How it is accessed using the objects.
17	Write a program in Java to demonstrate use of final class.
18	Describe abstract class called Shape which has three subclasses say Triangle, Rectangle, Circle. Define one method area() in the abstract class and override this area() in these three subclasses to calculate for specific object i.e. area() of Triangle subclass should calculate area of triangle etc. Same for Rectangle and Circle.
19	Write a program that illustrates interface inheritance. Interface P12 inherits from both P1 and P2. Each interface declares one constant and one method. The class Q implements P12. Instantiate Q and invoke each of its methods. Each method displays one of the constants.
20	Write a program in Java to demonstrate implementation of multiple inheritance using interfaces.
21	Write an application that illustrates method overriding in the same package and different packages. Also demonstrate accessibility rules in inside and outside packages.
22	Write a program in Java to develop user defined exception for 'Divide by Zero' error.
23	Write a program in Java to demonstrate multiple try block and multiple catch exception.
24	Write an small application in Java to develop Banking Application in which user deposits the amount Rs 1000.00 and then start withdrawing of Rs 400.00, Rs 300.00 and it throws exception "Not Sufficient Fund" when user withdraws Rs. 500 thereafter.
25	Write a program that executes two threads. One thread displays "Thread1" every 2,000 milliseconds, and the other displays "Thread2" every 4,000 milliseconds. Create the threads by extending the Thread class.
26	Write a program that executes two threads. One thread will print the even numbers and the another thread will print odd numbers from 1 to 50.
27	Write a program in Java to create, write, modify, read operations on a Text file.
28	Write a program that find factorial of number. Number read using scanner class.