PartA

1. Create a class Data which has two instance variables x,y and a static method interchange() which interchanges the values of two objects of the class.
2. Create a class employee with data members name, empid, basicpay, ta, da, hra, Netsalary. Write an object-oriented program to calculate the net salary of an employee and display all the details.
   Given that da = 40 % of basicpay
   Ta = 10% of bp
   Hra =350
   Net salary = bp+da+ta+hra.
3. Write a program to find the volume of 2 objects using method overloading concept.
4. Create a class Rectangle with attributes length and breadth which allows the creation of objects in the form
   Rectangle r=new Rectangle(10);
   Reactangle r1=new Reactagle(10,20);
   And display the details of the two objects.
5. Write a program which raise an exception when the number inputted is even.
6. Write a program to implement a synchronized method.
7. Create a generic method which compares two Numbers.

Part B

1. Create a class Box with Data members length,Breadth,Height.Create N Objects of the Box class and Find the total volume of all objects and store it a static variable.
2. Create a program to add two distance objects with attributes feet and inches.
3. Write a program to create a class which has an integer array A[] and length as its Data members. Write a program to search an element in the array using an instance method search().
4. Write a program to create a class MyMatrix with datamemebrs int row,col and and a 2-D integer array. use this class to add two matrix objects.
5. create a class customer with attributes SSN,Name,Address.write a constructor to set the values of the variables, and a method display() to display the details.
   Derive a class Account from the Customer class with attributes ACNO,and Balance. use a constructor to set the values of the variables and a method display() to display the details.Create an object of the Account class and display the details.

6. write a program to add two Complex class(which represents a complex Number) objects with attributes real and Imaginary.
7. Create an interface having methods area() and perimeter() in package P1.Create two classes Circle and Rectangle which implements the above interface package p2 and display the area and perimeter of the objects of the classes.

8. Write a java program to create an abstract class named Shape that contains two integers and an abtract method named printArea(). Provide two classes named Rectangle, Triangle such that each one of the classes extends the class Shape. Write a program to print the area of the given two shapes.
9. Write a program to create two threads one is printing the multiplication table of 2 and the other is printing the multiplication table of 3.(use Runnable interface)
10. Write a program to create two threads one is printing the multiplication table of 2 and the other is printing the multiplication table of 3.(By extending Thread class)
11. Demonstrate Client server communication using Socket – TCP/IP
12. Write a Java program which copy characters of one file to another file.Display the contents in the second file and count the no: of characters in the file.
13. Write a program to store N numbers in a Data file. Read the file and count the even and odd numbers in the file.
14. Create an applet which has Two text boxes to input numbers and four buttons for addition,subtraction,mutltiplication and division. Display the result in a Third textbox when the user clicks the buttons.
15. Create a Generic class which sorts an array of generic objects in ascending order.
16. Display any five shapes in an Applet window.