1. Write java program to sort the elements in an array .
2. Write a java program to search for an element in an array.Use getdata() to get the item to be searched.Use search(item) to search and display the status.
3. Write a JAVA program to do the following.

A class has two double variables. Write constructors A. Initialize the two variables with value 10 and 100. B.Initialize both the variable with same value.

4. Write a menu driven program to do the following.Each should be done by separate functions. Initialize two double variables and the char operator using constructor
   a. Add() b.Substract() c. Divide() d.Multiply()
5. Write a menu driven program to do the following .Using a constructor initialize a matrix with the data being read from the user.
   a. Find the sum of diagonal elements
   b. Find the number of even numbers in the matrix.

   6. Write a Java program to create a class called "School" with attributes for students, teachers, and classes, and methods to add and remove students and teachers, and to create classes.

7. Write 8.a Java program to create a class called "Restaurant" with attributes for menu items, prices, and ratings, and methods to add and remove items, and to calculate average rating.

8. Create a class named 'Member' having the following members:

 Data members

 1 - Name

 2 - Age

 3 - Phone number

 4 - Address

 5 - Salary

 It also has a method named 'printSalary' which prints the salary of the members.

 Two classes 'Employee' and 'Manager' inherits the 'Member' class. The 'Employee' and 'Manager' classes have data members 'specialization' and 'department' respectively. Now, assign name, age, phone number, address and salary to an employee and manager by objecting both classes and printing the same.

9.A group named XMA has hospitals in three major cities. Hospital one has 3 departments ,while the other two only have cardiology departments.All the hospitals have common chairperson and have different HR heads.The different HR heads have access in all the three hospitals also.

Use inheritance concepts to enforce the above.