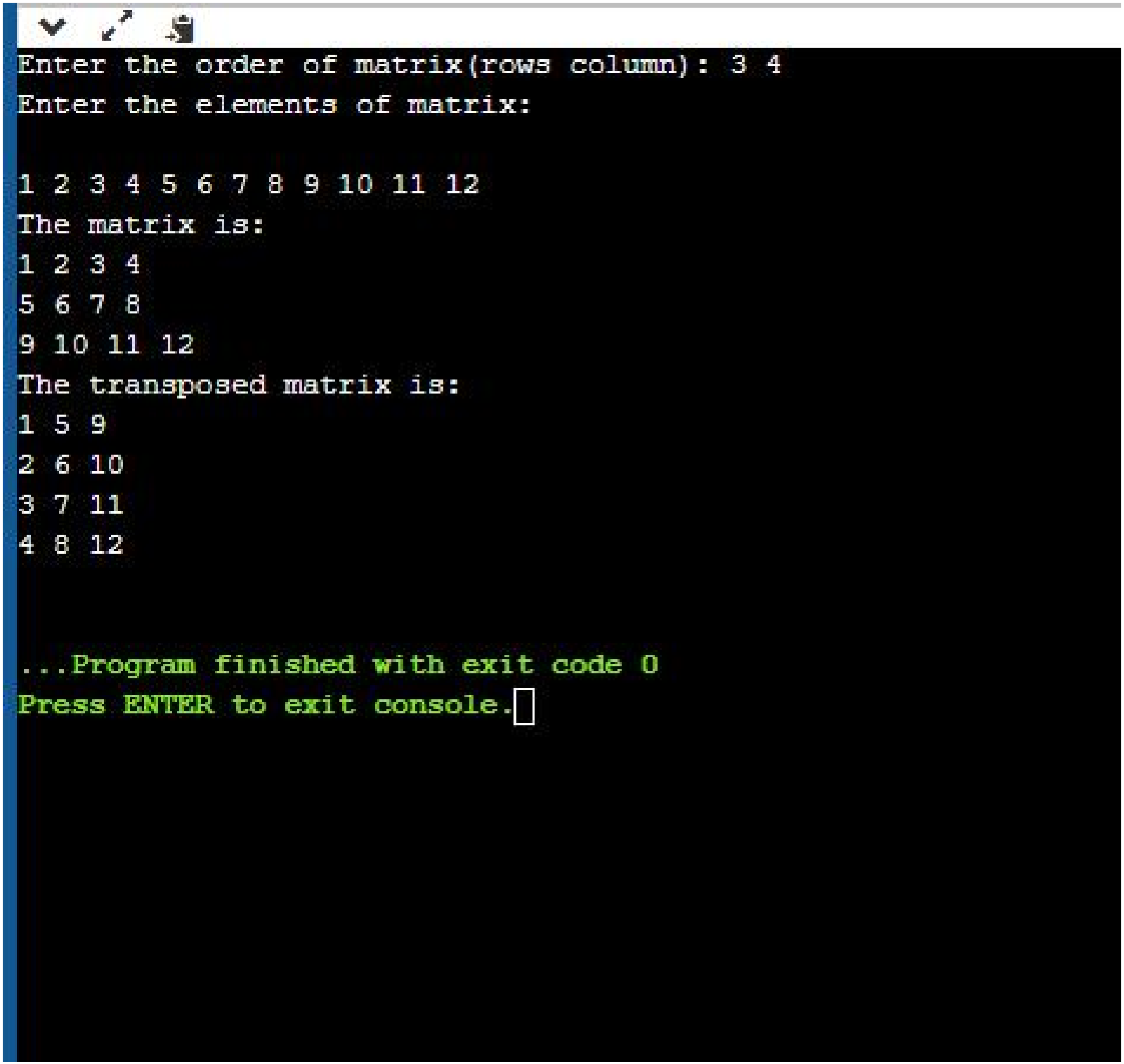
Main.java

```java
//Develop a Java program to find the transpose of a given matrix of order MXN.
import java.util.Scanner;
public class Main
{
    public static void main(String[] args) {
        int i,j,k=1;
        Scanner scan=new Scanner(System.in);
        System.out.print("Enter the order of matrix(rows column): ");
        int m = scan.nextInt();
        int n = scan.nextInt();

        System.out.println("Enter the elements of matrix: ");
        System.out.println();
        int twoD[][]=new int[m][n];
        for(i=0; i<m; i++)
            for(j=0; j<n; j++){
                int x = scan.nextInt();
                twoD[i][j] = x;
            }
            System.out.println("The matrix is: ");
            for(i=0; i<m;i++){
                for(j=0; j<n; j++)
                System.out.print(twoD[i][j]+ " ");
                System.out.println();
                }

            System.out.println("The transposed matrix is: ");
            for(i=0; i<n;i++){
                for(j=0; j<m; j++)
                System.out.print(twoD[j][i]+ " ");
                System.out.println();
                }
            }
    }
```


Enter the order of matrix(rows column): 3 4
Enter the elements of matrix:
1 2 3 4 5 6 7 8 9 10 11 12
The matrix is:
1 2 3 4
5 6 7 8
9 10 11 12
The transposed matrix is:
1 5 9
2 6 10
3 7 11
4 8 12
...Program finished with exit code 0
Press ENTER to exit console.

Main.java

```java
/* Develop a Java program which has the (only) class CircleDemo that has members-
radius, area and perimeter. Include methods to do the following.

a. accept the radius from the user
b. find the area of the circle
c. find the perimeter of the circle
d. Display all the details */


import java.util.Scanner;
class CircleDemo{
    double radius, area, perimeter;
    void accept(){
        Scanner scan=new Scanner(System.in);
        System.out.print("Enter the radius of the circle: ");
        radius = scan.nextDouble();
    }
    void area(){
        area = 3.14*radius*radius;
    }
    void perimeter(){
        perimeter= 2*3.14*radius;
    }
    void display(){
        System.out.println("The radius of the circle: "+radius);
        System.out.println("The area of the circle: "+area);
        System.out.println("The perimeter of the circle: "+perimeter);
    }
}
public class Main
{
    public static void main(String[] args){
        CircleDemo cd = new CircleDemo();
        cd.accept();
        cd.area();
```

Main.java

```
30 public class Main
31 {
32     public static void main(String[] args){
33         CircleDemo cd = new CircleDemo();
34         cd.accept();
35         cd.area();
36         cd.perimeter();
37         cd.display();
38     }
39 }
```

```
Enter the radius of the circle: 4
The radius of the circle: 4.0
The area of the circle: 50.24
The perimeter of the circle: 25.12


...Program finished with exit code 0
Press ENTER to exit console.
```

Main.java

```java
import java.util.Scanner;
class Actor{
    String id, name;
    int no_of_movies, no_of_years_exp;
    double average, x;

    void details(){
        Scanner scan = new Scanner(System.in);
        System.out.print("Enter actor's id: ");
        id = scan.nextLine();
        System.out.print("Enter actor's name: ");
        name = scan.nextLine();
        System.out.print("Enter no of movies: ");
        no_of_movies = scan.nextInt();
        System.out.print("Enter no of years experience: ");
        no_of_years_exp = scan.nextInt();
    }

    void average(){
        average= no_of_movies/no_of_years_exp;
        System.out.println("Average = "+ average);
    }

    double highest(){
        if(average>x){
            x=average;
        }
        return x;
    }
}
public class Main
{
    public static void main(String[] args) {
        double h=0;
        System.out.print("Enter the number of actors: ");
```

Main.java

```
36          Scanner scan = new Scanner(System.in);
37          int n = scan.nextInt();
38          Actor a[]=new Actor[n];
39          for(int i=0;i<n;i++)
40          {
41              System.out.println("Enter details of "+(i+1)+" actor-");
42              a[i]=new Actor();
43              a[i].details();
44              a[i].average();
45              System.out.println();
46          }
47
48          for(int i=0; i<n; i++){
49              if(a[i].highest()>h)
50              h = a[i].highest();
51          }
52
53          for(int i=0;i<n;i++){
54          if(h==a[i].average)
55          System.out.println("The name of actor with highest average is: "+a[i].name);
56      }
57      }
58  }
59
```

```
Enter the number of actors: 3
Enter details of 1 actor-
Enter actor's id: 123
Enter actor's name: abc
Enter no of movies: 10
Enter no of years experience: 5
Average = 2.0

Enter details of 2 actor-
Enter actor's id: 456
Enter actor's name: pqr
Enter no of movies: 10
Enter no of years experience: 2
Average = 5.0

Enter details of 3 actor-
Enter actor's id: 789
Enter actor's name: xyz
Enter no of movies: 10
Enter no of years experience: 10
Average = 1.0

The name of actor with highest average is: pqr


...Program finished with exit code 0
Press ENTER to exit console.
```

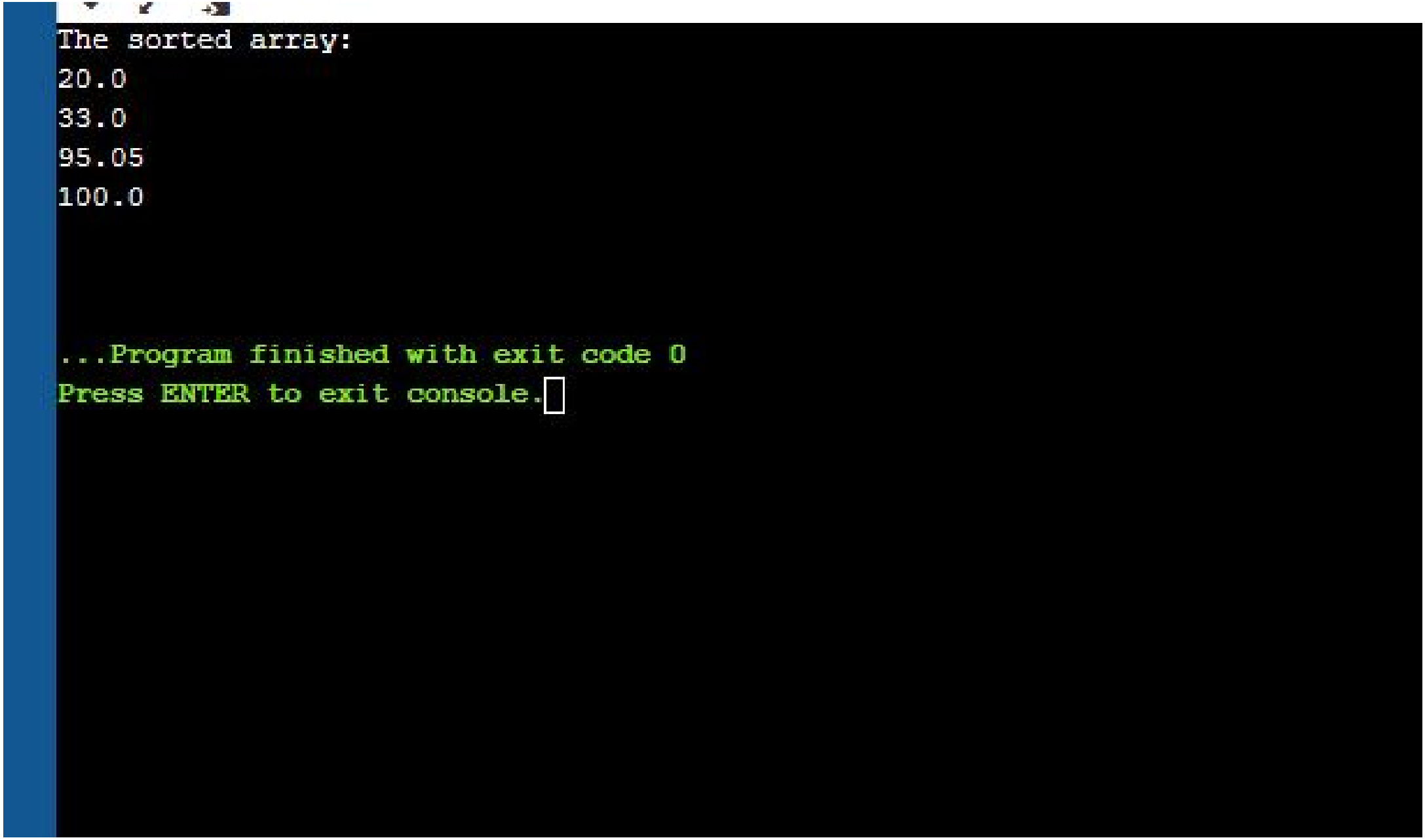
Main.java

```java
//Accept the values of a double array through command line. Display the sorted array.

public class Main
{
    public static void main(String[] args) {
        int n = args.length;
        double a[] = new double[n];
        int i, j;
        for(i=0; i<n; i++){
            a[i] = Double.parseDouble(args[i]);
        }
        double x;
        for(i=0;i<n;i++){
            for(j = i+1; j<n; j++){
                if(a[i]> a[j]){
                    x = a[i];
                    a[i] = a[j];
                    a[j] = x;
                }
            }
        }
        System.out.println("The sorted array: ");
        for(i=0; i<n; i++){
            System.out.println(a[i]);
        }
        System.out.println();
    }
}
```

input

Command line arguments: 100 95.05 20 33


The sorted array:
20.0
33.0
95.05
100.0
...Program finished with exit code 0
Press ENTER to exit console.