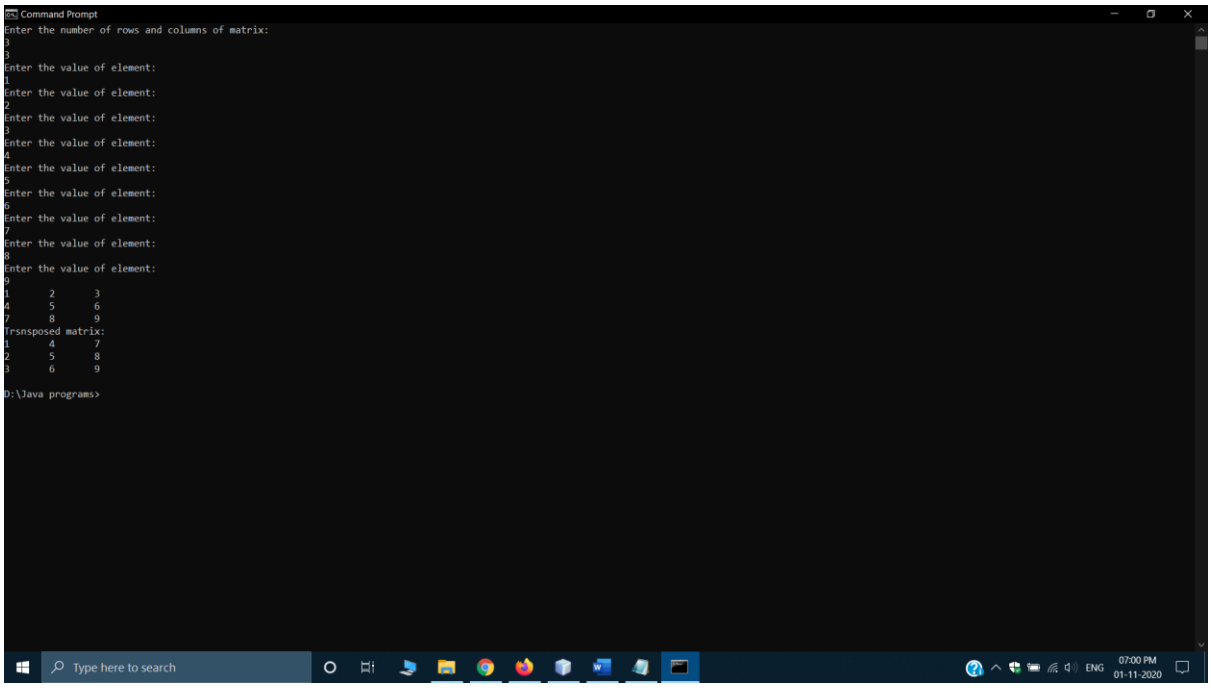
ANS 1:

```
import java.util.Scanner;
class Prac
{
  public static void main(String sss[]){
    Scanner sc=new Scanner(System.in);
    int arr1[][],arr2[][],row,column,val;
    System.out.println("Enter the number of rows and columns of matrix:");
    row=sc.nextInt();
    column=sc.nextInt();
    arr1=new int[row][column];
    arr2=new int[row][column];
    for(int i=0;i<row;i++){
      for(int j=0;j<column;j++){
        System.out.println("Enter the value of element:");
        val=sc.nextInt();
        arr1[i][j]=val;
      }
    }
    for(int i=0;i<row;i++){
      for(int j=0;j<column;j++){
        System.out.print(arr1[i][j]+"\t");

      }
      System.out.print("\n");
    }
    for(int i=0;i<row;i++){
      for(int j=0;j<column;j++){
        arr2[i][j]=arr1[j][i];
      }
    }
```

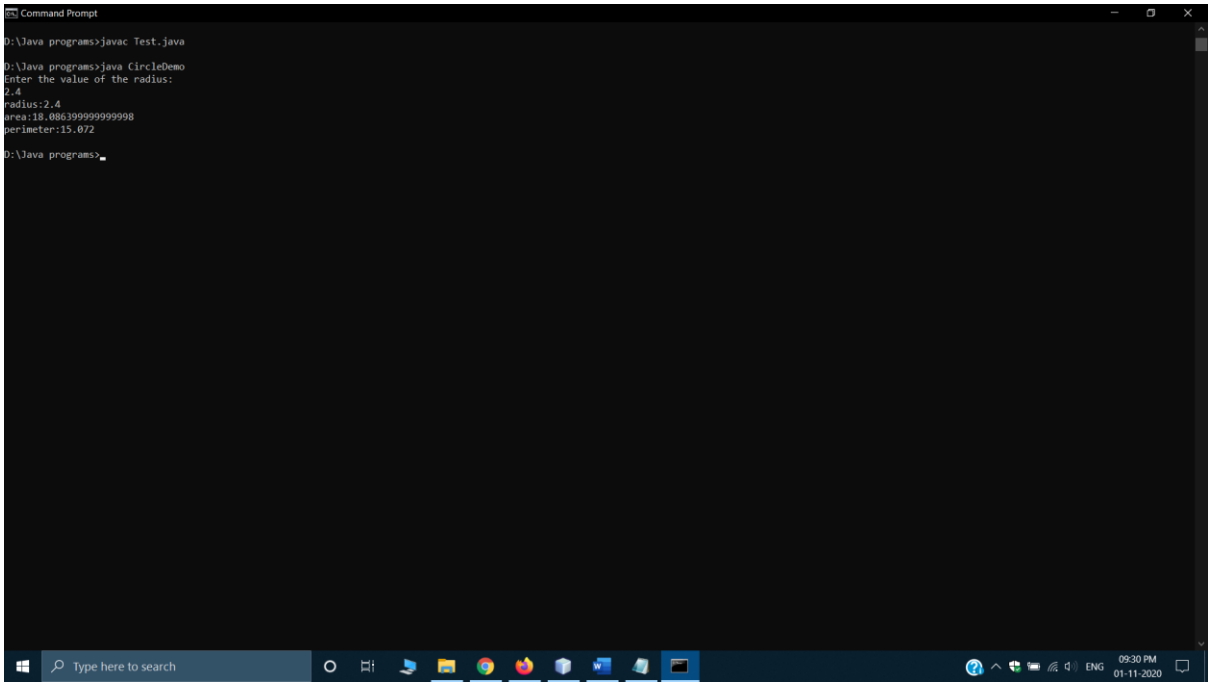
```
        System.out.println("Trsnsposed matrix:");
        for(int i=0;i<row;i++){
            for(int j=0;j<column;j++){
                System.out.print(arr2[i][j]+"\t");
            }
            System.out.print("\n");
        }
    }

}
```



ANS 2:

```
import java.util.Scanner;
class CircleDemo{
   static Scanner sc=new Scanner(System.in);
   static double radius,area,perimeter;
   static void getr(){
      System.out.println("Enter the value of the radius:");
      radius=sc.nextDouble();
   }
   static void area(){
      area=3.14*radius*radius;
   }
   static void perimeter(){
      perimeter=2*3.14*radius;
   }
   static void printd(){
      System.out.println("radius:"+radius);
      System.out.println("area:"+area);
      System.out.println("perimeter:"+perimeter);
   }
   public static void main(String args[]){
      getr();
      area();
      perimeter();
      printd();
   }
}
```



ANS 3:

```
import java.util.Scanner;

class actor{

int no_of_movies;

int years_of_exp;

String name;

int id;

double avg=0;

Scanner sc = new Scanner(System.in);


void accept(){

System.out.print("NAME :");

name = sc.next();

System.out.print("ID :");

id = sc.nextInt();

System.out.print("NO OF MOVIES :");

no_of_movies = sc.nextInt();

System.out.print("YEARS OF EXPERIENCE :");

years_of_exp = sc.nextInt();
```

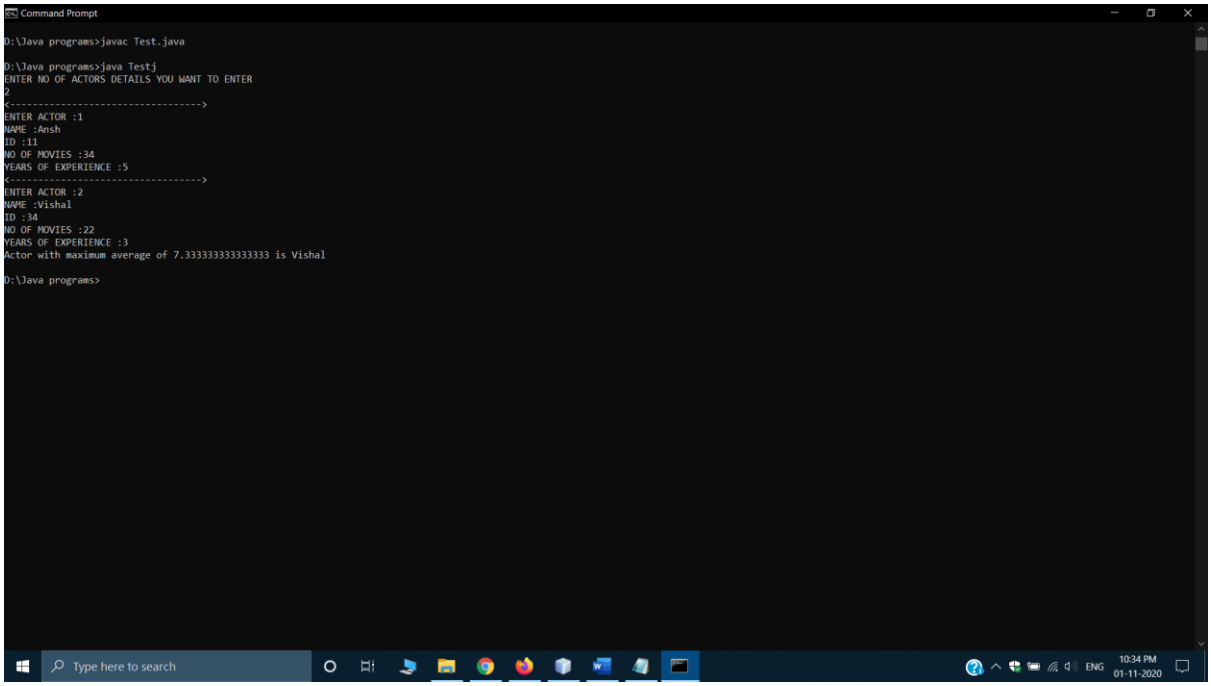
```
avg=(double)no_of_movies/years_of_exp;
}
}

class Testj{
public static void main(String ss[]){
int n;
String maxname=null;
double maxavg=0.0;
Scanner sc = new Scanner(System.in);
System.out.println("ENTER NO OF ACTORS DETAILS YOU WANT TO ENTER");
n = sc.nextInt();
actor a1[] = new actor[n];
for(int i=0;i<n;i++){
System.out.println("<---------------------------------->");
System.out.println("ENTER ACTOR :" +(i+1));
a1[i] = new actor();
a1[i].accept();

}
for(int i=1;i<n;i++){
if(a1[i].avg>a1[i-1].avg){
maxavg=a1[i].avg;
maxname=a1[i].name;
}else{
maxavg=a1[i-1].avg;
maxname=a1[i-1].name;
}
}
System.out.println("Actor with maximum average of "+ maxavg +" is "+ maxname);
```

}

}

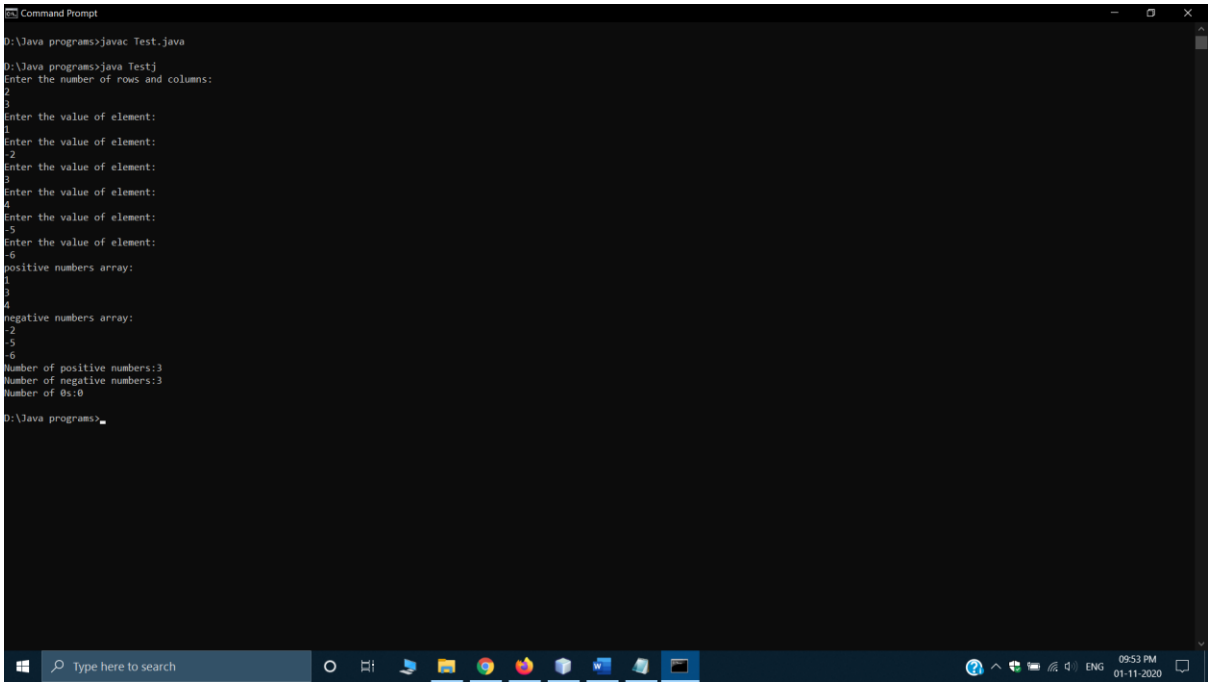


ANS 5:

```
import java.util.Scanner;
class Prac
{
  public static void main(String sss[])
  {
    Scanner sc=new Scanner(System.in);
    int full[][],pos[],neg[],row,column,val,c1=0,c2=0,c3=0;
    int temp1=0,temp2=0,temp3=0;
    System.out.println("Enter the number of rows and columns:");
    row=sc.nextInt();
    column=sc.nextInt();
    full=new int[row][column];
    pos=new int[row*column];
```

```
neg=new int[row*column];
for(int i=0;i<row;i++){
   for(int j=0;j<column;j++){
      System.out.println("Enter the value of element:");
      val=sc.nextInt();
      full[i][j]=val;
   }
}
for(int i=0;i<row;i++){
   for(int j=0;j<column;j++){
      if(full[i][j]>0){
         pos[temp1]=full[i][j];
         c1++;
         temp1++;
      }
      else if(full[i][j]<0){
         neg[temp2]=full[i][j];
         c2++;
         temp2++;
      }
      else if(full[i][j]==0){
         c3++;
         temp3++;
      }
   }
}
System.out.println("positive numbers array:");
for(int i=0;i<temp1;i++){
   System.out.println(pos[i]);
}
System.out.println("negative numbers array:");
```

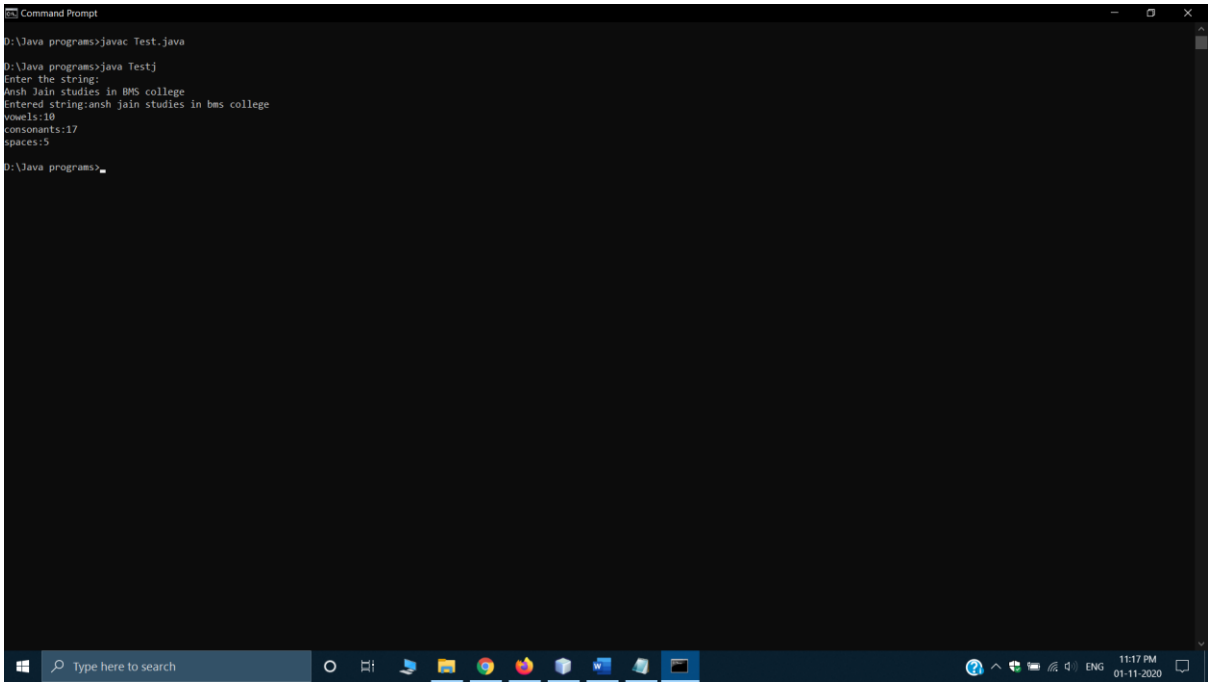
```
    for(int i=0;i<temp2;i++)
        System.out.println(neg[i]);
    System.out.println("Number of positive numbers:"+c1);
    System.out.println("Number of negative numbers:"+c2);
    System.out.println("Number of 0s:"+c3);
   }
}
```



ANS 6:

```
import java.util.Scanner;
class Testj{
   public static void main(String args[]){
      Scanner sc=new Scanner(System.in);
      String str;
      int count1=0,count2=0,count3=0;
      System.out.println("Enter the string:");
```

```
        str=sc.nextLine();
        str=str.toLowerCase();
        System.out.println("Entered string:"+str);
        for(int i=0;i<str.length();i++){
           switch (str.charAt(i)) {
               case 'a':
               case 'e':
               case 'i':
               case 'o':
               case 'u':
                  count1++;
                  break;
               case ' ':
                  count2++;
                  break;
               default:
                  count3++;
                  break;
           }
        }
        System.out.println("vowels:"+count1);
        System.out.println("consonants:"+count3);
        System.out.println("spaces:"+count2);
    }
}
```


Command Prompt
D:\Java programs>javac Test.java
D:\Java programs>java Testj
Enter the string:
Ansh Jain studies in BMS college
Entered string:ansh jain studies in bms college
vowels:10
consonants:17
spaces:5
D:\Java programs>
Type here to search
ENG
11:17 PM
01-11-2020