```java
import java.util.*;
class q1{
    public static void main(String args[] ) {
        String str1,str2;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the 1st string");
        str1=sc.nextLine();
        System.out.println("Enter the 2nd string");
        str2=sc.nextLine();

        int a=str1.length();
        int b=str2.length();

        char arr[]= new char[a+b];
        int j=0;
        for(int i=0;i<str1.length();i++){
            arr[j]=str1.charAt(i);
            j++;
        }
        for(int i=0;i<str2.length();i++){
          arr[j]=str2.charAt(i);
          j++;
      }

      char arr2[]= new char[a+b];

      j=0;
      for(int i=a+b-1;i>=0;i--){
        arr2[j]=arr[i];
        j++;
      }

      System.out.println(arr2);
}
}
```

```java
2. import java.util.*;


class point {
    int x, y;

    point(int a, int b) {
        x = a;
        y = b;
    }
}
```

```
class circle{
    public static void main(String args[])
    {
        Scanner sc= new Scanner( System.in);
        int m= sc.nextInt();
        int n=sc.nextInt();
        point pt=new point(m, n);
        double r=Math.sqrt(pt.x*pt.x+pt.y*pt.y);
        System.out.println(r);
    }
}
```

```
3. import java.util.*;


class dynamicArrayPrint {

    Scanner sc = new Scanner(System.in);

    public void arrayPrint() {

        System.out.println("Enter the number of rows :-");
        int n = sc.nextInt();

        for(int i=1; i<=n; i++)
        {
            int arr[] = new int[i];

            for(int j=0; j<i; j++)
            {
                arr[j] = i;
                System.out.print(arr[j] + " ");
            }

            System.out.println();
        }
    }
}

public class q3 {
    public static void main(String args[]) {

        dynamicArrayPrint obj = new dynamicArrayPrint();
        obj.arrayPrint();
    }
}
```

4b
```
public static void main(String args[]){


    int a=20;
    Integer i=Integer.valueOf(a);
    Integer j=a;

    System.out.println(a+" "+i+" "+j);
    }}
```

4a
```
class A {

    void msg() {
        System.out.println("A is called here");
    }
}

class B extends A {
    void msg() {
        super.msg();
        System.out.println("B is called here");
    }
}

class Main extends B {

    void msg() {
        super.msg();
        System.out.println("C is called here");
    }

    public static void main(String args[]) {
        Main cc = new Main();
        cc.msg();
}
}
```

6
```
import java.util.*;

public class NestedTryBlock
{
 public static void main(String args[])
 {
    Scanner sc = new Scanner(System.in);
    int a = sc.nextInt();
    int b = sc.nextInt();
    System.out.println("SIXE");
    int n = sc.nextInt();
    int k[] = new int[n];
```

```
    for(int i =0;i<n;i++)
    {
        k[i]=sc.nextInt();
    }
    System.out.println("Enter the elemt youwant to access");
    int l = sc.nextInt();
try{

     int c =a/b;
   }

    catch(Exception e)
    {
      System.out.println(e);
    }


    try{

     int d = k[l];

     }


    catch(Exception e)
    {
       System.out.println(e);
    }

}
}
```

6

```
import java.util.*;

class q8

{

   public static void main(String args[])

   {

      Scanner sc = new Scanner(System.in);


      while(true)

      {

        System.out.println("Press 1 for rectangle, 2 for triangle, 3 to exit.");
```

```
            int n = sc.nextInt();

            if(n == 3)
               break;
            else if(n == 1)
            {
               rectangle r = new rectangle();
               r.calculate_area();
               r.display();
            }
            else if(n == 2)
            {
               triangle r = new triangle();
               r.calculate_area();
               r.display();
            }

         }
      }
}
abstract class shape{
   public void calculate_area()
   {

   }
   public void display()
   {

   }
}
class rectangle extends shape{
```

```
    Scanner sc= new Scanner(System.in);
    int l = sc.nextInt();
    int b = sc.nextInt();

    int ans = 0;

  @Override
  public void calculate_area()
    {
        ans = l*b;
    }
    @Override
    public void display()
    {
      System.out.println("Area="+ans);
    }
}
class triangle extends shape
{
    Scanner sc= new Scanner(System.in);
    int h = sc.nextInt();
    int b = sc.nextInt();

    int ans = 0;
    @Override
    public void calculate_area()
    {
        ans=(b*h)/2;
    }
    @Override
```

```
    public void display()
    {
        System.out.println("Area="+ans);
    }
}
```

```
7 import java.util.*;

class q7{
 public static void main(String args[])
 {
    String str;
    Scanner sc=new Scanner(System.in);
    str=sc.nextLine();
    String words[]=str.split(" ");
    int mx=0;
    int count=0;
    for(int i=0;i<words.length;i++)
    {
        count=0;
        for(int j=0;j<words[i].length();j++)
        {
            if(words[i].charAt(j) != 'a' && words[i].charAt(j) != 'e' &&
words[i].charAt(j) != 'i' && words[i].charAt(j) != 'o' && words[i].charAt(j)
!= 'u'&& words[i].charAt(j) != ' ')
             {
                 count++;
             }
        }
        mx=Math.max(count,mx);

    }
    for(int i=0;i<words.length;i++)
    {
        count=0;
        for(int j=0;j<words[i].length();j++){
           if(words[i].charAt(j) != 'a'&& words[i].charAt(j) != 'e' &&
words[i].charAt(j) != 'i' && words[i].charAt(j) != 'o' && words[i].charAt(j)
!= 'u'&& words[i].charAt(j) != ' ')
             {
                 count++;
             }
        }
    //    System.out.println(count);
        if(count==mx)
```

```
        System.out.println(words[i]+" ");
        count=0;
  }
}
}
```