Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:32:51 **Register Number:** RA2031241010094

Q. STRING CONVERSION 9

Write a program to convert string to number without using Integer.parseInt() method .

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args){
       Scanner sc=new Scanner(System.in);
       int n=sc.nextInt();
       while(n-- >0)
       {
         int a=sc.nextInt();
         System.out.println(a);
       }

 }
}
```

Sample Input

```
5
3256
76289
90087
1234
5678
```

Sample Output

```
3256
76289
90087
1234
5678
```

Result

Thus, Program " **STRING CONVERSION 9** " has been successfully executed

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Q. PALINDROME CHECK

design an algorithm to accept a string from the user and check it is palindrome or not

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args) {
  Scanner sc=new Scanner(System.in);
       String str=sc.nextLine();
       int n=str.length();
       String rev="";
       for(int i=n-1;i>=0;i--)
       {
         rev=rev+str.charAt(i);
       }
       if(str.equals(rev))
         System.out.println("string is a palindrome");
       else
         System.out.println("string is not a palindrome");
 }
}
```

Sample Input

mam

Sample Output

string is a palindrome

Result

Thus, Program " **PALINDROME CHECK** " has been successfully executed

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Q. CountCode

Return the number of times that the string "code" appears anywhere in the given string, except we'll accept any letter for the 'd', so "cope" and "code" count.

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args) {
  Scanner sc=new Scanner(System.in);
      String str=sc.nextLine();
      int l=str.length();
      int c=0;
      for(int i=0;i<(l-3);i++)
      {
          if(str.charAt(i)=='c'&&str.charAt(i+1)=='o'&&(str.charAt(i+2)=='a'||str.charAt(i+2)=='b'||str.charAt(i+2)=='c'||str.charAt(i+2)=='d'||str.charAt(i+2)=='e'||str.charAt(i+2)=='f'||str.charAt(i+2)=='g'||str.charAt(i+2)=='h'||str.charAt(i+2)=='i'||str.charAt(i+2)=='j'||str.charAt(i+2)=='k'||str.charAt(i+2)=='l'||str.charAt(i+2)=='m'||str.charAt(i+2)=='n'||str.charAt(i+2)=='o'||str.charAt(i+2)=='p'||str.charAt(i+2)=='q'||str.charAt(i+2)=='r'||str.charAt(i+2)=='s'||str.charAt(i+2)=='t'||str.charAt(i+2)=='u'||str.charAt(i+2)=='v'||str.charAt(i+2)=='w'||str.charAt(i+2)=='x'||str.charAt(i+2)=='y'||str.charAt(i+2)=='z')&&str.charAt(i+3)=='e')
          {
              c++;
          }
      }
      System.out.println(c);
  }
}
```

Sample Input

```
aaacodebbb
```

Sample Output

```
1
```

Result

Thus, Program " **CountCode** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:34:15 **Register Number:** RA2031241010094

Q. PrefixAgain

Given a string, consider the prefix string made of the first N chars of the string. Does that prefix string appear somewhere else in the string? Assume that the string is not empty and that N is in the range 1..str.length().

Source Code

```
import java.util.*;
public class TestClass {
  public boolean prefix(String str,int n)
  {
    int l=str.length();
    String pre=str.substring(0,n);
    for(int i=n;i<l;i++)
    {
      if(n+i<=l)
      {
        if(pre.equals(str.substring(i,n+i)))
          return true;
      }
    }
    return false;
  }
  public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    String str=sc.nextLine();
    int n=sc.nextInt();
    TestClass obj=new TestClass();
    System.out.println(obj.prefix(str,n));

  }
}
```

Sample Input

```
abXYabc
1
```

Sample Output

```
true
```

Result

Thus, Program " **PrefixAgain** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:34:35 **Register Number:** RA2031241010094

Q. STRING CONVERSION 8

Write a java Java program to check whether one string is rotation of another string.

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args) {
       Scanner sc=new Scanner(System.in);
       String str=sc.nextLine();
       String nstr=sc.nextLine();
       if(str.length()==nstr.length()&&((str+str).indexOf(nstr)!=-1))
         System.out.println("s2 is a rotated version of s1");
       else
         System.out.println("s2 is not rotated version of s1");

 }
}
```

Sample Input

```
ChennaiSuperKIngs
SuperKingsChennai
```

Sample Output

```
s2 is not rotated version of s1
```

Result

Thus, Program " **STRING CONVERSION 8** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:35:05 **Register Number:** RA2031241010094

Q. Anagram

Tanisha plays a game Anagram where she has fun with letters in a sentence.

She picks up a sentence (or a word) and makes a new sentence (or a word) from the letters in the sentence she picked up.

Each letter should have the same count in both the sentences. Help her to check if both the sentences she made are Anagrams of each other. Two sentences are Anagrams if they are written using the exact letters, ignoring space, punctuation and capitalization.

Source Code

```
import java.util.*;
public class TestClass {
  static void isanagram(String str1,String str2)
  {
    String s1=str1.replaceAll("\\s","");
    String s2=str2.replaceAll("\\s","");
    boolean status=true;
    if(s1.length()!=s2.length())
    {
      status=false;
    }
    else
    {
      char[] arrs1=s1.toLowerCase().toCharArray();
      char[] arrs2=s2.toLowerCase().toCharArray();
      Arrays.sort(arrs1);
      Arrays.sort(arrs2);
      status=Arrays.equals(arrs1,arrs2);
    }
    if(status)
    {
      System.out.println(str1+ " and " +str2+ " are anagrams");
    }
    else
    {
      System.out.println(str1+ " and " +str2+ " are not anagrams");
    }
  }
  public static void main(String[] args) {
      Scanner sc=new Scanner(System.in);
      String str1=sc.nextLine();
      String str2=sc.nextLine();
      TestClass obj=new TestClass();
      obj.isanagram(str1,str2);

  }
}
```

Sample Input

```
SiLeNt CAT
LisTen AcT
```

Sample Output

```
SiLeNt CAT and LisTen AcT are anagrams
```

Result

Thus, Program " **Anagram** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:35:42 **Register Number:** RA2031241010094

Q. MAXand Min

Find the min and max value of given string

Input: 34#2a3
Output:
4
3

Source Code

```
import java.io.*;
public class TestClass {
  public static void main(String[] args)throws IOException {
      BufferedReader input=new BufferedReader(new InputStreamReader(System.in));
      String str=input.readLine();
      String str1=str.replaceAll("[^\\d.]","");
      int out=Integer.parseInt(str1);
      int big=0,small=100,p=1;
      for(int i=10;p!=0;i*=10)
      {
        p=out%10;
        out=out-p;
        out/=10;
        if(p>big)
        {
          big=p;
        }
        if(p<small&&p!=0)
        {
          small=p;
        }
      }
      System.out.println(big);
      System.out.println(small);
 }
}
```

Sample Input

34#2a3

Sample Output

4
2

Result

Thus, Program " **MAXand Min** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:36:03 **Register Number:** RA2031241010094

Q. Counting

Write a Java program to count the letters, spaces, numbers and other characters of an input string.

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args) {
  Scanner sc=new Scanner(System.in);
       String str=sc.nextLine();
       int a=0,s=0,n=0,o=0;
       for(int i=0;i<str.length();i++)
       {
         if((str.charAt(i)>=97&&str.charAt(i)<=122)||(str.charAt(i)>=65&&str.charAt(i)<=90))
           a++;
         else if(Character.isWhitespace(str.charAt(i)))
           s++;
         else if(str.charAt(i)=='0'||str.charAt(i)=='1'||str.charAt(i)=='2'||str.charAt(i)=='3'||str.charAt(i)=='4'||str.charAt(i)=='5'||str.charAt(i)=='6'||str.charAt(i)=='7'||str.charAt(i)=='8'||str.charAt(i)=='9')
           n++;
         else
           o++;
       }
       System.out.println("Letters "+a);
       System.out.println("Spaces "+s);
       System.out.println("Numbers "+n);
       System.out.println("Other Characters "+o);
 }
}
```

Sample Input

Raja raja cholan *** is unbeatable

Sample Output

Letters 26
Spaces 5
Numbers 0
Other Characters 3

Result

Thus, Program " **Counting** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-8-31 10:36:23 **Register Number:** RA2031241010094

Q. Multiplication of the numbers as a string

Given two numbers(Non-negative) represented as strings, return multiplication of the numbers as a string

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args) {
       Scanner sc=new Scanner(System.in);
       int str=sc.nextInt();
       int n=sc.nextInt();
       int p;
       p=str*n;
       System.out.println(p);

 }
}
```

Sample Input

8794
7

Sample Output

61558

Result

Thus, Program " **Multiplication of the numbers as a string** " has been successfully executed

Course: JAVA **Session:** Strings **Timestamp:** 2021-9-2 22:51:44 **Register Number:** RA2031241010094

Q. DEGREE CALCULATION

Write a java program to calculate the angle between the hour hand and the minute hand of a clock if the time is given in a string format.

Source Code

```
import java.util.*;
public class TestClass {
  public static void main(String[] args) {
  Scanner sc=new Scanner(System.in);
      float hour=sc.nextFloat();
       float min=sc.nextFloat();
       float h=(hour*360)/12+(min*360)/(12*60);
       float m=(min*360)/(60);
       float angle=Math.abs(h-m);
       if(angle<180&&angle>100)
       {
         angle=360-angle;
         System.out.println(angle+" Degree");
       }
       else
       System.out.println(angle+" Degree");
     }
}
```

Sample Input

```
12
47
```

Sample Output

```
258.5 Degree
```

Result

Thus, Program " **DEGREE CALCULATION** " has been successfully executed