

String Manipulation Programs ICSE

*/** Write a program to accept a two different characters & display the sum & difference of their*

ASCII values.

Sample i/p: A

D

Sample o/p: The sum of ASCII values = 165

*The difference of ASCII values =35 * */*

```
import java.util.*;
public class Q1
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a character");
        char ch1=sc.next().charAt(0);
        char ch2=sc.next().charAt(0);
        int a=(int)ch1;
        int b=(int)ch2;
        int sum=a+b;
        int diff=a-b;
        System.out.println("The sum of ASCII values =" +sum);
        System.out.println("The difference of ASCII values =" +Math.abs(diff));
    }
}
```

*/**Write a program to accept a alphabet in upper case or in lower case. Display the next alphabet*

*accordingly. i.e 'a' follows 'b' & 'z' follows 'a' * */*

```
import java.util.*;
public class Q2
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a character");
        char ch=sc.next().charAt(0);
        if(ch=='z')
            System.out.println("a");
        else if(ch=='Z')
            System.out.println("A");
        else
```

```

        System.out.println(++ch);
    }
}
/** * Write a program to accept a character if it is a letter then display the case i.e lower or
upper,
otherwise check whether it is digit or special character
Sample i/p: p
Sample o/p: p is a letter
           p is in lower case.
** */
import java.util.*;
public class Q3
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a character");
        char ch = sc.next().charAt(0);
        if(Character.isLetter(ch))
        {
            System.out.println(ch+"is a letter");
            if(Character.isUpperCase(ch))
            System.out.println(ch +" is in upper Case");
            else
            System.out.println(ch +" is in lower Case");
        }
        else if(Character.isDigit(ch))
            System.out.println(ch +" is a digit");
        else
            System.out.println(ch +" is a Special Character");
    }
}
/** Write a program in java to accept a string/word and display the new string after removing
all
the vowels present in it.
Sample i/p: COMPUTER APPLICATIONS
Sample o/p: CMPTR PPLCTNS **/
import java.util.*;
public class Q4
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String w="";
        Scanner sc=new Scanner(System.in);

```

```

        System.out.println("Enter a String");
        String st=sc.nextLine();
        for(int i=0;i<st.length();i++)
        {
            char x=st.charAt(i);
            if(x!='A' && x!='E' && x!='I' && x!='O' && x!='U' && x!='a' &&
x!='e' && x!='i' && x!='o' && x!='u')
                w=w+x;
        }
        System.out.println(w);
    }
}

```

/** Write a program to input a word/string, count all the alphabets excluding vowels present in the word/string and display the result.

**** Sample i/p: Happy New Year***

**** Sample o/p: no of alphabets excluding vowels = 8 **/***

```

import java.util.*;
public class Q5
{
    public static void main(String args[])
    {
        System.out.println("\f");
        int c=0;
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a string");
        String st=sc.nextLine();
        for(int i=0;i<st.length();i++)
        {
            char x=st.charAt(i);
            if(x!=' ' && x!='A' && x!='E' && x!='I' && x!='O' && x!='U' &&
x!='a' && x!='e' && x!='i' && x!='o' && x!='u')
                c++;
        }
        System.out.println("no of alphabets excluding vowels = "+c);
    }
}

```

/** Write a program in java to accept a name(containing three word)and display only the initials(i.e first alphabet of each word). display the longest word and the length of the longest word present in the string.

Sample i/p: LAL KRISHNA ADVANI

Sample o/p: L K A **/

```

import java.util.*;
public class Q6
{
    public static void main(String args[])

```

```

{
    System.out.println("\f");
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter a String");
    String st=sc.nextLine();
    st=st.trim();
    st=' '+st;
    for(int i=0;i<st.length();i++)
    {
        char x=st.charAt(i);
        if(x==' ')
            System.out.print(st.charAt(i+1)+" ");
    }
}
}

```

/** Write a program in java to accept a name containing three words and display the surname first followed by the first and middle names.

Sample i/p: MOHANDAS KARAMCHAND GANDHI

Sample o/p: GANDHI MOHANDAS KARAMCHAND * */

```

import java.util.*;
public class Q7
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a String");
        String st=sc.nextLine();
        st=st.trim();
        int n= st.length();
        int first=st.indexOf(' ');
        int last=st.lastIndexOf(' ');
        st=st.substring(last,n)+' '+st.substring(0,last);
        System.out.println(st);
    }
}

```

/** Write a program in java to accept a string/sentence and find the frequency of given alphabets.

display the longest word and the length of the longest word present in the string.

Sample i/p: WE ARE LIVING IN COMPUTER WORLD

Enter an alphabets whose frequency is to be checked :E

Sample o/p: The frequency of 'E' is 3 * */

```

import java.util.*;
public class Q8
{
    public static void main(String args[])

```

```

{
    System.out.println("\f");
    int c=0;
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter a String");
    String st=sc.nextLine();
    System.out.println("Enter an alphabets whose frequency is to be checked: ");
    char ch=sc.next().charAt(0);
    for(int i=0;i<st.length();i++)
    {
        char x=st.charAt(i);
        if(x==ch)
            c++;
    }
    System.out.println("The frequency of "+ch+" is "+c);
}
}

```

***/** A man has written a statement as "My name is Alok Kumar Gupta and my age is 45 years".
Later on he realized that he had declared his name as Alok instead of Ashok and age 45 instead of***

***35. Write a Program in java to correct his age in the predicted statement. Display the o/p as
Sample o/p: My name is Ashok Kumar Gupta and my age is 35 years. ` * */***

```

import java.util.*;
public class Q9
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String st="My name is Alok Kumar Gupta and my age is 45 years";
        st=st.replace("Alok","Ashok");
        st= st.replace("45","35");
        System.out.println(st);
    }
}

```

package StringPkg;

/**

Write a program to accept a string/sentence in upper case and Display the longest word and the length of the longest word present in the string.

SamplE i/p: "TATA FOOTBALL ACADEMY WILL PLAY AGAINST MOHAN BAGAN"

Sample o/p: The longest word : FOOTBALL : The length of word :8 ` * */

```

import java.util.*;
public class Q10
{
    public static void main(String args[])

```

```

{
    System.out.println("\f");
    int max_len=0,len=0;
    String w="",max_word="";
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter a String");
    String st=sc.nextLine();
    st=st.trim();
    st=st+' ';
    for(int i=0;i<st.length();i++)
    {
        char x=st.charAt(i);
        if(x!=' ')
            w=w+x;
        else
        {
            len=w.length();
            if(len>max_len)
            {
                max_word=w;
                max_len=len;
            }
            w="";
        }
    }
    System.out.println("The longest word : "+max_word+" The length of word: "+
max_len);
}
}
/** Write a program to accept a string in upper case and find the frequency of each vowel
present
in string:
Sample i/p: "RAIN WATER HARVESTING ORGANIZED BY JUSCO"
Sample o/p: Frequency of 'A' = 4
              Frequency of 'E' = 3
              Frequency of 'I' = 3
              Frequency of 'O' = 2
              Frequency of 'U' = 1          */
import java.util.*;
public class Q11
{
    public static void main(String args[])
    {
        System.out.println("\f");
        int ACOU=0,ECO=0,ICO=0,OCO=0,UOU=0;
        Scanner sc=new Scanner(System.in);

```

```

System.out.println("Enter a String");
String st=sc.nextLine();
for(int i=0;i<st.length();i++)
{
    char x=st.charAt(i);
    if(x=='A')
        ACOU++;
    else if(x=='E')
        ECOU++;
    else if(x=='I')
        ICOU++;
    else if(x=='O')
        OCOU++;
    else if(x=='U')
        UCOU++;
}
System.out.println("FREQUENCY OF 'A' =" +ACOU);
System.out.println("FREQUENCY OF 'E' =" +ECOU);
System.out.println("FREQUENCY OF 'I' =" +ICOU);
System.out.println("FREQUENCY OF 'O' =" +OCOU);
System.out.println("FREQUENCY OF 'U' =" +UCOU);
}
}
/**

```

**** Write a program to accept a string as: IF IT RAINS, YOU WILL NOT GO TO PLAY" Convert all characters of the word in lower case other than the first characters so as to obtain the following output:***

Sample o/p: If It Rains, You Will Not Go To Play.

**** */***

```

import java.util.*;
public class Q12
{
    public static void main(String args[])
    {
        System.out.println("\f");
        int f=0;
        String w="";
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a String");
        String st=sc.nextLine();
        st= st.trim();
        st=' '+st;
        st= st.toLowerCase();
        for(int i=0;i<st.length();i++)
        {
            char x=st.charAt(i);

```

```

        if(x==' ')
        {
            w=w+x;
            f=1;
            continue;
        }
        if(f==1)
        {
            x=Character.toUpperCase(x);
            f=0;
        }
        w=w+x;
    }
    System.out.println(w);
}
}

/* OR
for(int i=0;i<st.length();i++)
{
    char x=st.charAt(i);
    if(x==' ')
    {
        int n=st.length();
        char y= Character.toUpperCase(st.charAt(i+1));
        st=st.substring(0,i+1)+y+st.substring(i+2,n);
    }
}
System.out.println(w);
**/

```

/** Write a program to accept a word and display the ASCII of each character.

Sample i/p: BLUEJ

Sample o/p: ASCII of B = 66

ASCII of L = 75

ASCII OF U = 84

ASCII OF E = 69

ASCII of L = 73 * */

```

import java.util.*;
public class Q13
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a word");
        String st=sc.next();
        for(int i=0;i<=st.length()-1;i++)

```



```

Scanner sc=new Scanner(System.in);
System.out.println("enter a string");
String st=sc.nextLine();
st=st.trim();
st=" "+st;
for(int i=0;i<st.length();i++)
{
    char x= st.charAt(i);
    if(x==' ')
        w=w+st.charAt(i+1);
}
System.out.println(w);
}
}

```

/** Write a program in java to enter a string and display all the palindrome words present in the String.

Sample i/p: MOM AND DAD ARE NOT AT HOME

Sample o/p: MOM

DAD ****/***

```

import java.util.*;
public class Q16
{
    public static void main(String args[])
    {
        char x;
        String s1="",s2="",rev="";
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a string");
        String st=sc.nextLine();
        st= st.toUpperCase();
        st=st.trim();
        st=st+" ";
        for(int i=0;i<st.length();i++)
        {
            x=st.charAt(i);
            if(x!=' ')
            {
                s1=s1+x;
                s2=x+s2;
            }
            else
            {
                if(s1.equals(s2))
                    System.out.println(s1);
            }
        }
    }
}

```

```

        s1="";
        s2="";
    }
}
}
}

```

/** Write a program to accept a string and display the string in a reverse order.

Sample i/p: COMPUTER IS FUN

Sample o/p: FUN IS COMPUTER

****/***

```

import java.util.*;
public class Q17
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String w="",s1="";
        char x=' ';
        Scanner sc= new Scanner(System.in);
        System.out.println("enter a String:");
        String st= sc.nextLine();
        st=st.trim();
        st=" "+st;
        for(int i= st.length()-1;i>=0;i--)
        {
            x=st.charAt(i);
            if(x!=' ')
                w=x+w;
            else
            {
                s1=s1+w+" ";
                w="";
            }
        }
        System.out.println(s1);
    }
}

```

/**Write a Program to input a string and print the character which occur maximum no of times

within a string.

Sample i/p: James Gosling developed java

Sample o/p: The character with maximum no of times: e

****/***

```

import java.util.*;
public class Q18
{
    public static void main(String args[])
    {

```

```

System.out.println("\f");
char x=' ',ch=' ';
int c,l=0;
Scanner sc= new Scanner(System.in);
System.out.println("enter a string:");
String st= sc.nextLine();
st=st.trim();
for(int i=0;i<st.length();i++)
{
    x=st.charAt(i);
    c=0;
    if(st.indexOf(x)!=st.lastIndexOf(x))
    {
        for(int j=i+1;j<st.length();j++)
        {
            if(x==st.charAt(j))
            c++;
        }
        if(c>l)
        {
            ch=x;
            l=c;
        }
    }
}
System.out.println("the character with no of times:"+ ch);
}
}
/**Write a program to input a string and print the word containing maximum no of vowels.
SAMPLE i/p: HAPPY NEW YEAR
SAMPLE O/P: THE WORD WITH MAXIMUM NO OF VOWELS : YEAR */
import java.util.*;
public class Q19
{
    public static void main(String args[])
    {
        System.out.println("\f");
        char x;
        int c=0,f=0,l=0;
        String w="",max="";
        Scanner sc =new Scanner(System.in);
        System.out.println("enter a string");
        String st=sc.nextLine();
        st=st.trim();
        st=st+" ";
        for(int i=0;i<st.length();i++)

```

```

        {
            x=st.charAt(i);
            if(x!=' ')
            {
                w=w+x;
                if(x=='a' || x=='A' || x=='e' || x=='E' || x=='i' || x=='I' || x=='o' ||
x=='O' ||
                x=='u' || x=='U')
                    c++;
            }
            else
            {
                if(f==0)
                {
                    max=w;
                    l=c;
                    f=1;
                }
                else if(c>l)
                {
                    max=w;
                    l=c;
                }
                w="";
                c=0;
            }
            System.out.println("max="+max+" l= "+l);
        }
        System.out.println("The word with maximum no of vowels :"+ max);
    }
}

```

/** Consider the string as “Blue bottle is in Blue bag lying on the Blue carpet”. Write a program to accept a sample string and replace the word 'Blue' with 'red'. The new string is displayed as

“Red bottle is in Red bag lying on the Red carpet”

```

*/
import java.util.*;
public class Q20
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter a string:");
        String st=sc.nextLine();
        st=st.replace("Blue","Red");
    }
}

```

```

        System.out.println(st);
    }
}
/**A computer typist has the habit of deleting the middle name 'kumar' while entering the names containing three words,write a program to enter a name containing three words and display the new name after deleting middle name 'kumar'.
sample input : Ashish Kumar Nehra
Sample o/p: Ashish Nehra */
import java.util.*;
public class Q21
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a 3 word name:");
        String st=sc.nextLine();
        st=st.trim();
        int first=st.indexOf(' ');
        int last=st.lastIndexOf(' ');
        String s1=st.substring(0,first)+" "+st.substring(last+1,st.length());
        System.out.println(s1);
    }
}
/** Write a program to accept a word & convert it into lower case, if it is in upper case. Display a new word by replacing only the vowels with the character following it.
Sample i/p: Computer
Sample o/p: cpmptfr */
import java.util.*;
public class Q22
{
    public static void main(String args[])
    {
        System.out.println("\f");
        char x;
        Scanner sc= new Scanner(System.in);
        System.out.println("enter a string");
        String st=sc.nextLine();
        st=st.toLowerCase();
        for(int i=0;i<st.length();i++)
        {
            x=st.charAt(i);
            if(x=='a' || x=='e' || x=='i' || x=='o' || x=='u')
            st=st.replace(x,++x);
        }
    }
}

```

```

        System.out.println(st);
    }
}
/* Write a program to input a word & print the new word after removing all the repeated alphabets
   * sample i/p: applications
   * sample o/p: aplictons */
import java.util.*;
public class Q23
{
    public static void main(String args[])
    {
        String s1;
        char x=0;
        System.out.println("\f");
        Scanner sc = new Scanner(System.in);
        System.out.println("enter a string:");
        String st= sc.nextLine();
        for(int i=0;i<st.length()-1;i++)
        {
            x=st.charAt(i);
            if(st.indexOf(x)!=st.lastIndexOf(x))
            {
                for(int j=i+1;j<st.length();j++)
                {
                    char y=st.charAt(j);
                    if(x==y)
                        st=st.substring(0,j)+st.substring(j+1,st.length());
                }
                System.out.println(st);
            }
        }
    }
}
/**A string is said to be 'unique' if none of the alphabets present in the string are repeated.
Write
a program to accept a string and check whether the string is unique or not. The program
displays a message accordingly.
Sample i/p: COMPUTER
SAMPLE O/P: UNIQUE STRING */
import java.util.*;
public class Q24
{
    public static void main(String args[])
    {
        System.out.println("\f");
    }
}

```

```

int f=0;
char x;
Scanner sc= new Scanner(System.in);
System.out.println("enter a string:");
String st=sc.nextLine();
for(int i=0;i<st.length();i++)
{
    x=st.charAt(i);
    if(st.indexOf(x)!=st.lastIndexOf(x))
    {
        System.out.println("NOT A UNIQUE STRING");
        f=1;
        break;
    }
}
if(f==0)
System.out.println("UNIQUE STRING");
}
}
/** Write a program to input a string and print the frequency of vowels of each word
present in the string.
SAMPLE I/P: MASTERING INFORMATION TECHNOLOGY
SAMPLE O/P: NO OF VOWELS PRESENT IN MASTERING : 3
NO OF VOWELS PRESENT IN INFORMATION : 5
NO OF VOWELS PRESENT IN TECHNOLOGY : 3 */
import java.util.*;
public class Q25
{
    public static void main(String args[])
    {
        System.out.println("\f");
        char x;
        int c=0;
        String w="";
        Scanner sc =new Scanner(System.in);
        System.out.println("enter a string");
        String st=sc.nextLine();
        st=st.trim();
        st=st+" ";
        for(int i=0;i<st.length();i++)
        {
            x=st.charAt(i);
            if(x!=' ')
            {
                w=w+x;
            }
        }
    }
}

```



```

        if(x=='a' || x=='A' || x=='e' || x=='E' || x=='i' || x=='I' || x=='o' || x=='O'
           || x=='u' || x=='U')
            c++;
        }
        else
        {
            System.out.println(" NO OF VOWELS PRESENT IN "+ w +" = "+c);
            w="";
            c=0;
        }
    }
}
}
/**

```

A non Palindromte word can be a palindrome word just by adding reverse of the word with the original word. Write a program to accept a non -palidrome word and display the new word after

making it a palindrome.

Sample i/p: ICSE

Sample o/p: The new word after making it palindrome as: ICSEESCI

****/***

```

import java.util.*;
public class Q26
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a string");
        String st=sc.nextLine();
        st=st.trim();
        for(int i=st.length()-1;i>=0;i--)
        {
            char x=st.charAt(i);
            st=st+x;
        }
        System.out.println(st);
    }
}

```

/**Write a program to input a string. Count and dispaly the frequency of each alphabet in an order, Which is present in the string.

Sample i/p: COMPUTER APPLICATIONS

Sample o/p: A-2,C-2,I-1,L-2,M-1,N-1,O-2,P-3,R-1,S-1,T-2,U-1

**** */***

```

import java.util.*;
public class Q27
{
    public static void main(String args[])

```

```

{
    int c=0,f=0;
    char x;
    System.out.println("\f");
    Scanner sc=new Scanner(System.in);
    System.out.println("enter a string");
    String st=sc.nextLine();
    st=st.trim();
    st=st.toUpperCase();
    System.out.println("Character\tFrequency");
    for(char i='A';i<'Z';i++)
    {
        f=0;c=0;
        for(int j=0;j<st.length();j++)
        {
            x=st.charAt(j);
            if(x==i)
            {
                f=1;
                c++;
            }
        }
        if(f==1)
            System.out.print("    "+i+"\t \t"+c+"\n");
    }
}
}

```

/** Write a program to input a string. Convert it into upper case. Count and output the number of

double letter sequences that exists in the string

Sample i/p: SHE WAS FEEDING THE LITTLE RABBIT WITH AN APPLE.

Sample o/p: 4 **/

```

import java.util.*;
public class Q28
{
    public static void main(String args[])
    {
        int c=0;
        System.out.println("\f");
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a string");
    }
}

```

```

        String st=sc.nextLine();
        st=st.toUpperCase();
        for(int i=0;i<st.length()-1;i++)
        {
            if(st.charAt(i)==st.charAt(i+1))
                c++;
        }
        System.out.println(c);
    }
}
/**
BLUEJ
BLUE
BLU
BL
B
*/
public class Q29A
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String str="BLUEJ";
        int n=str.length();
        for(int i=n;i>=0;i--)
        {
            System.out.println(str.substring(0,i));
        }
    }
}

```

```

/**
J
E E
U U U
L L L L
B B B B B
*/
public class Q29B
{
    public static void main(String args[])
    {
        String str="BLUEJ";
        int n=str.length();
        int k=0;
    }
}

```

```

        for(int i=4;i>=0;i--)
        {
            for(int j=0;j<=k;j++)
            {
                System.out.print(str.charAt(i));
            }
            System.out.println();
            k++;
        }
    }
}
/**
BLUEJ
LUEJ
UEJ
EJ
J
*/
public class Q29C
{
    public static void main(String args[])
    {
        String str="BLUEJ";
        int n,i,k=0;
        n=str.length();
        for(i=0;i<n;i++)
        {
            System.out.println(str.substring(k,n));
            k++;
        }
    }
}

/**
ABCDE
BCDE
CDE
DE
F
*/
import java.util.*;
public class Q30A
{
    public static void main(String args[])

```

```

{
    System.out.println("\f");
    Scanner sc =new Scanner(System.in);
    System.out.println("enter how many steps:");
    int n= sc.nextInt();
    char ch='A', ch1;
    for(int i=n;i>=0;i--)
    {
        ch1=ch;
        for(int j=0;j<=i;j++)
        {
            System.out.print(ch1);
            ch1++;
        }
        System.out.println(" ");
        ch++;
    }
}
}
/**
A
BC
DEF
GHIJ
KLMNO
*/
public class Q30B
{
    public static void main(String args[])
    {
        char ch='A';
        for(int i=0;i<5;i++)
        {
            for(int j=0;j<=i;j++)
            {
                System.out.print(ch++);
            }
            System.out.println();
        }
    }
}
/**
ABCDE
ABCDA
ABCAB
ABABC

```

AABCD

```
*/  
public class Q30C  
{  
    public static void main(String args[])  
    {  
        System.out.println("\f");  
        char ch='A',ch1;  
        int i,j,k=0;  
        for(i=4;i>=0;i--)  
        {  
            ch='A';  
            for(j=0;j<=i;j++)  
            {  
                System.out.print(ch++);  
            }  
            ch1='A';  
            for(j=1;j<=k;j++)  
            {  
                System.out.print(ch1++);  
            }  
            System.out.println();  
            k++;  
        }  
    }  
}  
/*
```

ABCDE
BCDE
CDE
DE
E

*/

```
public class Q30D  
{  
    public static void main(String args[])  
    {  
        System.out.println("\f");  
        char ch='A';  
        int k=0,n;  
        for(int i=4;i>=0;i--)  
        {  
            for(int j=0;j<k;j++)  
            {  
                System.out.print("*");  
            }  
        }  
    }  
}
```

```

        for(int l=4;l>=l-i;l--)
        {
            System.out.print(ch++);
        }
        System.out.println("");
        k++;
    }
}
}
/** Write a program to display the pattern
EDCBA
 EDCB
  EDC
   ED
    E
*/
public class Q30E
{
    public static void main(String args[])
    {
        System.out.println("\f");
        char ch='E';
        int k=0,l=5;
        for(int i=5;i>0;i--)
        {
            ch='E';
            for(int j=0;j<k;j++)
            {
                System.out.print(" ");
            }
            k++;
            for(int j=l;j>0;j--)
            {
                System.out.print(ch--);
            }
            l--;
            System.out.println();
        }
    }
}

```

```

/** Write a program to display the pattern
A
AB
ABC

```

ABCD
ABCDE

```
*/
import java.util.*;
public class Q30F
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter no of lines");
        int n=sc.nextInt();
        char ch='A';
        int k=n-1,l=0;
        for(int i=0;i<n;i++)
        {
            ch='A';
            for(int j=k;j>0;j--)
            {
                System.out.print(" ");
            }
            k--;
            for(int j=0;j<=l;j++)
            {
                System.out.print(ch++);
            }
            l++;
            System.out.println();
        }
    }
}
```

*/** Write a program to generate a triangle or an inverted triangle till n terms based upon user's*

choice of triangle to be displayed.

Example 1

Sample input : Type1 for a triangle

Type2 for an Inverted Triangle

Enter your choice: 1

Enter the no of Terms:5

Sample Output:

```
*****
****
***
**
*
```

Example 2

*Sample input : Type1 for a triangle
Type2 for an Inverted Triangle
Enter your choice: 2
Enter the no of Terms:5*

Sample Output:

ABCDE

ABCD

ABC

AB

A

**/*

```
import java.util.*;
public class Q31
{
    public static void main(String args[])
    {
        System.out.println("\f");
        int n;
        Scanner sc= new Scanner(System.in);
        System.out.println("Type 1 for triangle\nType 2 for Inverted Triangle\nEnter your
Choice: ");
        int choice=sc.nextInt();
        switch(choice)
        {
            case 1: System.out.println("Enter no of terms:");
                    n=sc.nextInt();
                    int k=0,l=5;
                    for(int i=0;i<n;i++)
                    {
                        for(int j=0;j<=k;j++)
                        {
                            System.out.print(" ");
                        }
                        for(int j=l;j>0;j--)
                        {
                            System.out.print("*");
                        }
                        k++;
                        l--;
                        System.out.println();
                    }
                    break;
            case 2: System.out.println("Enter no of terms:");
                    n=sc.nextInt();
                    k=n;
                    char ch='A';
                    for(int i=0;i<n;i++)
```

```

        {
            ch='A';
            for(int j=0;j<k;j++)
            {
                System.out.print(ch++);
            }
            k--;
            System.out.println();
        }
        break;
    default:    System.out.println("You entered a wrong choice");
}
}
}

```

/**Write a program to generate a triangle or an inverted triangle till n terms based upon user's choice of triangle to be displayed.

Example 1

Sample input : Type1 for a triangle

Type2 for an Inverted Triangle

Enter your choice: 1

Enter a word: BLUEJ

Sample Output:

```

    B
   L L
  U U U
 E E E E
J J J J J

```

Example 2

input : Type1 for a triangle

Type2 for an Inverted Triangle

Enter your choice: 2

Enter a word: BLUEJ

Sample Output:

```

    BLUEJ
   BLUE
  BLU
 BL
 B
*/

```

```

import java.util.*;
public class Q32
{
    public static void main(String args[])
    {
        System.out.println("\f");
        int n;
        String st;
    }
}

```

```

Scanner sc= new Scanner(System.in);
System.out.println("Type 1 for triangle\nType 2 for Inverted Triangle\nEnter your
Choice: ");
int choice=sc.nextInt();
switch(choice)
{
    case 1: System.out.println("Enter a word :");
            st=sc.next();
            n=st.length();
            int k=n-1,l=0;
            for(int i=0;i<n;i++)
            {
                for(int j=0;j<=k;j++)
                {
                    System.out.print(" ");
                }
                k--;
                for(int j=0;j<=l;j++)
                {
                    System.out.print(st.charAt(i));
                }
                l++;
                System.out.println();
            }
            break;
    case 2: System.out.println("Enter a word :");
            st=sc.next();
            n=st.length();
            for(int i=n;i>0;i--)
            {
                System.out.println(st.substring(0,i));
            }
            break;
    default: System.out.println("You entered a wrong choice");
}
}
}
/**
BLUEJ
BLUE
BLU
BL
B
*/
public class Pattern1
{

```

```

public static void main(String args[])
{
    System.out.println("\f");
    String str="BLUEJ";
    int n=str.length();
    for(int i=n;i>=0;i--)
    {
        System.out.println(str.substring(0,i));
    }
}

```

```

/*
* B
* BL
* BLU
* BLUE
* BLUEJ
*/
public class Pattern2
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String str="BLUEJ";
        int i,n;
        n= str.length();
        for(i=0;i<=n;i++)
        {
            System.out.println(str.substring(0,i));
        }
    }
}
/**

```

```

BLUEJ
LUEJB
UEJBL
EJBLU
JBLUE
*/

```

```

public class Pattern3
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String str="BLUEJ";
    }
}

```

```

        int n,i;
        n=str.length();
        for(i=0;i<=n;i++)
        {
            System.out.print(str.substring(i,n));
            System.out.println(str.substring(0,i)+"\n");
        }
    }
}

```

```

/*
BLUEJ
BLUE
BLU
BL
B
*/
public class Pattern4
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String str="BLUEJ";
        int k=0,n;
        n=str.length();
        for(int i=n;i>=0;i--)
        {
            for(int j=0;j<k;j++)
            {
                System.out.print(" ");
            }
            System.out.println(str.substring(0,i));
            k++;
        }
    }
}
/**
B
BL
BLU
BLUE

```

BLUEJ

```
*/
public class Pattern5
{
    public static void main(String args[])
    {
        System.out.println("\f");
        String str="COMPUTER APPLICATION";
        int n= str.length();
        int k=n;
        for(int i=0;i<n;i++)
        {
            for(int j=0;j<k;j++)
            {
                System.out.print(" ");
            }
            System.out.println(str.substring(0,i));
            k--;
        }
    }
}
/**
ABCDEF
GHIJK
LMNO
PQR
ST
U
*/
import java.util.*;
public class Pattern6
{
    public static void main(String args[])
    {
        System.out.println("\f");
        Scanner sc =new Scanner(System.in);
        System.out.println("enter how many steps:");
        int n= sc.nextInt();
        char ch='A';
        for(int i=n;i>=0;i--)
        {
            for(int j=0;j<=i;j++)
            {
                System.out.print(ch);
                ch++;
            }
        }
    }
}
```

```
    }  
    System.out.println("\n");  
}  
}
```