**COMPUTER APPLICATION**
**BLUEJ STRING PROGRAMS**

**Program 1: write a program input a string and count and display number of vowels present in the string**
**Sample Input: Computer World**
**Sample Output: The Number of vowels: 4**

```
import java.util.*;

class Vowel
{
   public static void main(String args[])
   {
       Scanner in = new Scanner(System.in);
      System.out.println("Enter a string :");
      String str = in.nextLine();
      char ch;int v=0;
      int len=str.length();
      for(int i=0;i<len;i++)
      {
         ch=str.charAt(i);

if(ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U'||ch=='a'||ch=='e'||ch=='i'||ch
=='o'||ch=='u')
         v++;
      }
         System.out.println("The Number  of vowels present in the string"+v);
      }
   }
```

**Program 2: Write a program to accept a String in lower case and replace 'e' with in the given String. Display the new String.**
**Sample Input:computer science**
**Sample Output: comput*r sci*nc***

```
import java.util.*;
public class Replace
{
   public static void main(String args[])
{
  Scanner in=new Scanner(System.in);
   int a, p;
   String st;
   char chr;

   System.out.println("Enter a string");
   st=in.nextLine();
   p=st.length();
   for(a=0;a<p;a++)
   {
      chr=st.charAt(a);

         if(chr=='e')
         chr='*';

      System.out.print(chr);
   }
  }
}
```

**Program 3: Write a program in Java to accept a word/a String and display the new string**
**after removing all the vowels present in it.**
**Sample Input: COMPUTER APPLICATIONS**
**Sample Output: CMPTR PPLCTNS**

```
import java.util.Scanner;

public class Vowel_Remove
{
   public static void main(String args[]) {
      Scanner in = new Scanner(System.in);
      System.out.println("Enter a word or sentence:");
      String str = in.nextLine().toUpperCase();
      int len = str.length();
      String str1= "";
      for (int i = 0; i < len; i++) {

         char ch = str.charAt(i);

         if (ch == 'A' || ch == 'E' || ch == 'I' ||ch == 'O' || ch == 'U')
         {
            continue;
         }
         str1 = str1 + ch;
      }

      System.out.println("String with vowels removed");
      System.out.println(str1);
   }
}
```

**Program 4: write a program to a accept a string and display:**
**i. The number of lower case characters**
**ii. The number of uppercase character**
**iii. The number of special case characters**
**iv. The number of digits present in the string**
**Sample Input: S.T.D code of New Delhi - 011**
**Sample Output :**
**The number of lower case characters =12**
**The number of lowerupper =5**
**The number of special case characters =9**
**The number of digits present in the string =3**

```
import java.util.*;
public class Special
{
   public static void main (String args[])
   {
      Scanner in=new Scanner(System.in);
      int a,p,up=0,lc=0,d=0,spl=0;
      String st;
      char chr;
      System.out.println("Enter your strinng");
      st=in.nextLine();
      p=st.length();
      for(a=0;a<p;a++)
      {
         chr=st.charAt(a);
         if(chr>='a'&&chr<='z')
         lc=lc+1;
         else if(chr>='A'&& chr<='Z')
         up=up+1;
         else if(chr>='0'&&chr<='9')
         d=d+1;
         else
         spl=spl+1;
      }
      System.out.println("The number of lowercase charecters:"+lc);
```

```
    System.out.println("The number of uppercase charecters:"+up);
    System.out.println("The number of special charecters:"+spl);
    System.out.println("The number of digits:"+d);
      }
    }
```

**Program 5: Write a program to accept a string and change the case of each letter of the string.Display the new string.**
**Sample Input: WelComE TO School**
**Sample Output:wELcOMe to sCHOOL**

```
import java.util.*;
public class Convert_Case
{
   public static void main(String args[])
   {
      Scanner in=new Scanner(System.in);
      int a,i,p;
      String st,st1=" ";
      char chr,chr1;
       System.out.println("Enter your string");
       st=in.nextLine();
       p=st.length();
       for(a=0;a<p;a++)
       {
          chr=st.charAt(a);
          if(chr>='a'&&chr<='z')
          {
             chr1=Character.toUpperCase(chr);
             st1=st1+chr1;
           }
           else if(chr>='A'&&chr<='Z')
          {
             chr1=Character.toLowerCase(chr);
              st1=st1+chr1;
           }
           else
```

```
            st1=st1+chr;
          }
             System.out.println("The new string after new converting the  case of
each alphabet:");
             System.out.println(st1);
            }
}
```

**Program 6: write a program to accept a name and display the initials along with  the surname.**
**Sample Input: Mohandas Karamchand Gandhi**
**Sample Output:M.K.Gandhi**

```
import java.util.*;
public class Surname
{
   public static void main(String args[])
   {
  Scanner in=new Scanner(System.in);
  String st, sn=" ", st1="", st2="";
    int i,p;
      char chr;
      System.out.println("Enter a full name");
      st=in.nextLine();
      st=' '+st;
      p=st.lastIndexOf(' ');
      sn=st.substring(p);
      for(i=0;i<p;i++)
      {
         chr=st.charAt(i);
         if(chr==' ')

         st1=st1+st.charAt(i+1)+'.';
      }
      st2=st1+sn;
      System.out.println("Name as initial with surnamae:");
      System.out.println(st2);
```

```
   }
}
```

**Program 7: Write a program in Java to accept a name(Containing three words) and Display only the initials (i.e., first letter of each word).**
**Sample Input: LAL KRISHNA ADVANI**
**Sample Output: L K A**

```
import java.util.Scanner;

public class InitialsOfName
{
   public static void main(String args[]) {
      Scanner in = new Scanner(System.in);
      System.out.println("Enter a name of 3 or more words:");
      String str = in.nextLine().toUpperCase();
      str=' '+str;  String w="";
      int len = str.length();
      for (int i = 0; i < len; i++)
      {
         char ch = str.charAt(i);
         if (ch == ' ')
         {
            char ch2 = str.charAt(i + 1);
            w=w+ch2;
         }
      }
            System.out.println(w);
         }
      }
```

**Program 8: Write a program to input a word and check whether it is a palindrome word or not.**
**Sample Input: madam**
**Sample Output: madam**
**(A word is said to be Palindrome, if the new word formed after reversing the letters is the same as the original word)**

```
import java.util.*;
public class Palindrome
{
   public static void main(String args[])
{
  Scanner in=new Scanner(System.in);
   int  len;
   String st;
   char chr;String w="";
   System.out.println("Enter a string");
   st=in.next();
   len=st.length();
   for(int i=len-1;i>=0;i--)
   {
      chr=st.charAt(i);
      w=w+chr;
   }
   if(st.equals(w))
   System.out.println("It is a palindrome word");
   else
   System.out.println("It is not a palindrome word");
}
}
```

**Program 9: Write a program in Java to enter a sentence. Display the words which are only palindrome.**

**Sample Input: MOM AND DAD ARE NOT AT HOME**

**Sample Output: MOM**

**DAD**

```
import java.util.*;
 class palinword
 {
 public static void main(String args[])
 {
 Scanner in=new Scanner(System.in);
 String s,st="",pw="";char c,ch=' ';int i,len,l,j;
 System.out.println("Enter a sentance");
 s=in.nextLine();
 s=s+" ";
 l=s.length();
 for(i=0;i<l;i++)
 {
 c=s.charAt(i);
 if(c!=' ')
 {
 st=st+c;
 }
 else
 {
 len=st.length();
 for(j=(len-1);j>=0;j--)
 {
 ch=st.charAt(j);
 pw=pw+ch;
 }
 if(pw.equals(st))
 System.out.println(st);
 st="";pw="";
 }
 }
 }}
```

**Program 10:Write a program in Java to accept a String in upper case and replace all the vowels present in the String with Asterisk(*)sign.**
**Sample Input: "TATA STEEL IS IN JAMSHEDPUR"**
**Sample output: T*T* ST**L *S *N J*MSH*DP*R**

```
import java.util.*;
public class VowelReplace
{
   public static void main(String args[]) {
      Scanner in = new Scanner(System.in);
      System.out.println("Enter a string in uppercase:");
      String str = in.nextLine().toUpperCase();
      String s = "";
      int len = str.length();

      for (int i = 0; i < len; i++) {
         char ch = str.charAt(i);
         if (ch == 'A' || ch == 'E' || ch == 'I' ||ch == 'O' ||ch == 'U') {
           s =s + '*';
         }
         else {
           s = s + ch;
         }

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