COMPUTER APPLICATION
BLUEJ STRING PROGRAMS
Set-2

Program1. Write a program to accept a string. Display the new string after reversing each character of the word.
Input: New Delhi is the capital of India
Output: weN ihleD si eht latipac fo aidnI

```java
import java.util.*;
class New_Delhi
{
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 the String");
s=in.nextLine();
s=s+" ";
l=s.length();
for(i=0;i<l;i++)
{
c=s.charAt(i);
if(c!=' ')
{
st=st+c;//create word
}
else
{
len=st.length();
for(j=(len-1);j>=0;j--)
{
ch=st.charAt(j);
pw=pw+ch;
}
System.out.print(pw+" ");
st="";pw="";  }}}}
```

Program2. 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 Input: MOHANDAS KARAMCHAND GANDHI
Sample Output: GANDHI MOHANDAS KARAMCHAND

```java
 import java.util.*;
public class Gandhi
{
   public static void main(String args[])
   {
      String st, sn="", st1="", st2="";
      int i,p;
      char chr;
      Scanner in=new Scanner(System.in);
      System.out.println("Enter a full name");
      st=in.nextLine();

      p=st.lastIndexOf(' ');
      sn=st.substring(p+1);
      st1=st.substring(0,p);
      st2=sn+" " +st1;
      System.out.println("Name as initial with surnamae:");
      System.out.println(st2);
   }}
```

Program3. Write a program to input a sentence and display only those words

which begin and end with vowel.

```
import java.util.*;
class begin_end_vowel
{
public static void main()
{
Scanner sc=new Scanner(System.in);
String s,w="";
int i;int c=0;char ch1=0,ch2=0;
System.out.println("Enter a sentence:");
s=sc.nextLine().toUpperCase();
s=s+" ";
for(i=0;i<s.length();i++)
{
char x=s.charAt(i);
if(x==' ')
{
 ch1=w.charAt(0);
 ch2=w.charAt(w.length()-1);
if((ch1=='A'||ch1=='E'||ch1=='I'||ch1=='O'||ch1=='U')&&(ch2=='A'
||ch2=='E'||ch2=='I'||ch2=='O'||ch2=='U'))

System.out.println(w);
w="";
}
else
{
w=w+x;//creating each word

}
}
}
}
```

Program4. A non-palindrome word can be made a palindrome word just by adding the
reverse of the word to the original word. Write a program to accept a non-palindrome word and
display the new word after making it a palindrome.
Sample Input :
ICSE
Sample Output :
The new word making it palindrome as:
 ICSEESCI

```java
import java.util.*;
class V26 {
public static void main(String args[]) {
Scanner in = new Scanner(System.in);
System.out.println("Enter String :");
String str = in.nextLine().toUpperCase();
String rev ="";
for(int i=str.length()-1;i>=0;i--) {
rev+=str.charAt(i);
}
if(str.equals(rev)) {
System.out.println("It is Palindrome String.");
}
else {
System.out.println("It is not a Palindrome String.");
System.out.println("Palindrome String :"+(str+rev));
}
}
}
```

Program5. Write a program to accept a word and convert it into lower case, if it is in upper case. Display the new word by replacing only the vowels with the letter following it.

Sample Input : computer

Sample Outpur : cpmpvtfr

```java
import java.util.*;
public class Replace_vowel
{
public static void main()
{
Scanner sc=new Scanner(System.in);
String s;
System.out.println("Enter the word");
s=sc.next();
String t=s.toLowerCase();
int n=t.length();
for(int i=0;i<n;i++)
{
char c=t.charAt(i);
if(c=='a'||c=='e'||c=='i'||c=='o'||c=='u')
{
int j=(int)(c);
char k=(char)(j+1);
System.out.print(k);
}
else
{
System.out.print(c);
}
}
}
}
```

Program6. Write a program to java to accept a sentence and a word separately.
Find and prinnt the frequency of the given word in the sentence.
Sample Input: the quick brown fox jumps over the lazy dog
frequency of the word
to be searched: the
Sample Output: 2

```java
import java.util.*;
public class Frequency
{
   public static void main(String args[])
   {
      String st,st1="", st2="";
      int i,p,f=0;
      char chr;
      Scanner in=new Scanner(System.in);
      System.out.print("Enter a string");
      st=in.nextLine();
      System.out.print("Enter a word to be searched in the string");
      st1=in.next();
      st=st+' ';
      p=st.length();
      for(i=0;i<p;i++)
      {
         chr=st.charAt(i);
         if(chr==' ')
         {
            if(st2.compareTo(st1)==0)
            f=f+1;
            st2="";
         }
         else
         st2=st2+chr;
      }
      System.out.print("Frequency of searched word present in the string:"+f);
   }}
```

Program7. Write a program to accept a sentence. Display the sentence in reversing order of its word.
Sample Input: Computer is Fun
Sample Output: Fun is Computer

```java
import java.util.*;

public class Computer_Fun
{
  public static void main(String args[]) {
    Scanner in = new Scanner(System.in);
    System.out.println("Enter a sentence:");
    String str = in.nextLine();
    str = " " + str;
    String word = "";
    int len = str.length();

    for (int i = len - 1; i >= 0; i--)
    {
      char ch = str.charAt(i);
      if (ch == ' ')
      {
        System.out.print(word + " ");
        word = "";
      }
      else {
        word = ch + word;
      }
    }
  }
}
```

Program8. Write a program to input a sentence and display only those words which begin and end with the same alphabet.

```
import java.util.*;
class SameAlphabet
{
static void main()
{
Scanner sc=new Scanner(System.in);
String s,w="";
int i;
System.out.println("Enter a sentence:");
s=sc.nextLine().toUpperCase();
s=s+" ";
for(i=0;i<s.length();i++)
{
char x=s.charAt(i);
if(x!=' ')
w=w+x;
else
{
char f=w.charAt(0);
char v=w.charAt(w.length()-1);
if(f==v)
System.out.print(w+"  ");
w="";
}
}
}
}
```

Program9. Write a program to enter a String/Sentence and display the longest word.
Sample Input: TATA FOOTBALL ACADEMY WILL PLAY
Sample Output: FOOTBALL

```java
import java.util.*;
class long_word {
 public static void main(String args[]) {
 Scanner in = new Scanner(System.in);
 System.out.println("Enter string:");
 String s=in.nextLine();
 s=s+' ';String w=" "; String lw=" ";
  int l=s.length();
  for( int i=0;i<l;i++)
   {
   char ch=s.charAt(i);
   if(ch!=' ')
  {
  w=w+ch;
  }
   else
  {
 if(w.length()>lw.length())
 {
   lw=w;  }
   w="";
 }}
 System.out.println("Longest word"+lw);
  }}
```

Program10. Intput a string and print the pair of vowels in the string
(input: beautiful beautify; output:EA AU EA AU   total pairs=4)

```java
import java.util.Scanner;

public class PairOfVowel
{

  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter a string: ");
    String s = sc.nextLine();

    // Convert string to uppercase
    String s1 = s.toUpperCase();

    int c = 0;
    for (int i = 0; i < s1.length() - 1; i++) {
      char ch1 = s1.charAt(i);
      char ch2 = s1.charAt(i + 1);

if((ch1=='A'||ch1=='E'||ch1=='I'||ch1=='O'||ch1=='U')&&(ch2=='A'||ch2=='E'||ch2=='I'||ch2=='O'||ch2=='U'))
        {
          System.out.println("Found pair OF VOWELS " + ch1 + ch2);
          c++;
        }
    }
    System.out.println("Total pairs = " + c);
  }
}
```