***Dt : 7/9/2022***

***Assignment-1:(Solution)***

***wap to read a String and display the count of Vowels from the String?***

***DemoString2.java***

***package maccess;***

***import java.util.\*;;***

***public class DemoString2 {***

***public static void main(String[] args) {***

***Scanner s = new Scanner(System.in);***

***System.out.println("Enter the String:");***

***String str = s.nextLine().toLowerCase();***

***int len = str.length();***

***int count=0;***

***for(int i=0;i<=len-1;i++)***

***{***

***char ch = str.charAt(i);***

***switch(ch)***

***{***

***case 'a':count++;***

***break;***

***case 'e':count++;***

***break;***

***case 'i':count++;***

***break;***

***case 'o':count++;***

***break;***

***case 'u':count++;***

***break;***

***}//end of switch***

***}//end of loop***

***System.out.println("Count of Vowels:"+count);***

***s.close();***

***}***

***}***

***o/p:***

***Enter the String:***

***PROGRAM***

***Count of Vowels:2***

***==========================================================***

***Assignment-2:(Soulution)***

***wap to read a String and check the String is palindrome String or***

***not?***

***DemoString3.java***

***package maccess;***

***import java.util.\*;;***

***public class DemoString3 {***

***public static void main(String[] args) {***

***Scanner s = new Scanner(System.in);***

***System.out.println("Enter the String:");***

***String str = s.nextLine().toLowerCase();***

***int len = str.length();***

***int k=len-1;***

***int count=0;***

***for(int i=0;i<=len-1;i++)***

***{***

***char ch1 = str.charAt(i);//char from starting index***

***char ch2 = str.charAt(k);//char from ending index***

***if(ch1==ch2)***

***{***

***count++;***

***}***

***k--;***

***}//end of loop***

***if(len==count)***

***{***

***System.out.println("Palindrome String...");***

***}***

***else***

***{***

***System.out.println("Not-Palindrome String...");***

***}***

***s.close();***

***}***

***}***

***o/p:***

***Enter the String:***

***madam***

***Palindrome String...***

***===========================================================***

***faq:***

***define TypeCasting process?***

***=>The process of converting one datatype value into another***

***datatype value is known as TypeCasting process.***

***=>TypeCasting process on primitive datatypes canbe done in two ways:***

***(a)Widening process***

***(b)Narrowing process***

***(a)Widening process:***

***=>The process of converting LowerDatatype values into Higher***

***DataType values is known as Widening process or UpCasting process***

***or Implicit TypeCasting process.***

***char->byte->short->int->long->float->double***

***(b)Narrowing process:***

***=>The process of converting HigherDataType values into Lower***

***DataType values is known as Narrowing process or DownCasting process***

***or Explicit TypeCasting process.***

***double->float->long->int->short->byte->char***

***============================================================***

***faq:***

***define ASCII?***

***=>ASCII stands for 'American Standard Code for Information***

***Interchange' and which is unique code representation for every***

***character entered from the keyboard.***

***UpperCase Alphabets : 65 to 90***

***LowerCase Alphabets : 97 to 122***

***Numbers(0 to 9) : 48 to 57***

***DemoASCII.java***

***package maccess;***

***public class DemoASCII {***

***public static void main(String[] args) {***

***System.out.println("====UppperCase Alphabets=====");***

***for(int i=65;i<=90;i++)***

***{***

***char ch = (char)i;//ASCII(int) to char***

***System.out.print(ch+" ");***

***}//end of loop***

***System.out.println("\n====LowerCase Alphabets=====");***

***for(int i=97;i<=122;i++)***

***{***

***char ch = (char)i;//ASCII(int) to char***

***System.out.print(ch+" ");***

***}//end of loop***

***System.out.println("\n====Numbers(0-9)=====");***

***for(int i=48;i<=57;i++)***

***{***

***char ch = (char)i;//ASCII(int) to char***

***System.out.print(ch+" ");***

***}//end of loop***

***}***

***}***

***o/p:***

***====UppperCase Alphabets=====***

***A B C D E F G H I J K L M N O P Q R S T U V W X Y Z***

***====LowerCase Alphabets=====***

***a b c d e f g h i j k l m n o p q r s t u v w x y z***

***====Numbers(0-9)=====***

***0 1 2 3 4 5 6 7 8 9***

***======================================================***

***Ex\_program : wap to read a String and display the numbers from the***

***given String?***

***DemoString4.java***

***package maccess;***

***import java.util.\*;;***

***public class DemoString4 {***

***public static void main(String[] args) {***

***Scanner s = new Scanner(System.in);***

***System.out.println("Enter the String:");***

***String str = s.nextLine();***

***int len = str.length();***

***int count=0;***

***for(int i=0;i<=len-1;i++)***

***{***

***char ch = str.charAt(i);***

***int k = (int)ch;//char to ASCII(int)***

***if(k>=48 && k<=57)//simple if***

***{***

***System.out.print(ch+" ");***

***count++;***

***}***

***}//end of loop***

***System.out.println("\nCount of Numbers:"+count);***

***s.close();***

***}***

***}***

***o/p:***

***Enter the String:***

***java18 by 2022***

***1 8 2 0 2 2***

***Count of Numbers:6***

***========================================================***

***Assignment:***

***wap to read a String and display the following:***

***Count of Vowels :***

***Count of Consonents :***

***Count of Numbers :***

***Sum of Numbers :***

***Count of others :***

***==========================================================***

***faq:***

***define String Concatenation process?***

***=>The process of combining multiple Strings into a Single String***

***is known as Concatenation process.***

***=>String Concatenation process canbe done in two ways:***

***(i)using concat() method***

***(ii)Using '+' symbol***

***Ex : DemoString5.java***

***package maccess;***

***public class DemoString5 {***

***public static void main(String[] args) {***

***String s1 = "java";***

***String s2 = "language";***

***String s3 = "program";***

***String s4 = s1.concat(s2).concat(s3);***

***String s5 = s1+s2+s3;***

***System.out.println("s4:"+s4.toString());***

***System.out.println("s5:"+s5.toString());***

***}***

***}***

***o/p:***

***s4:javalanguageprogram***

***s5:javalanguageprogram***

***Note:***

***=>In String Concatenation process separate object is created to***

***hold concatenated strings.***

***=========================================================***

***faq:***

***define String Comparision process?***

***=>The process of comparing two strings is known as String***

***Comparision process.***

***=>String Comparision process canbe done in three ways:***

***(a)Using 'equals()' method***

***(b)Using 'compareTo()' method***

***(c)Using 'is equal to'(==) operator***

***(a)Using 'equals()' method:***

***=>eqauls() method is used to compare two Strings and generate***

***boolean result.***

***Method Signature:***

***public boolean equals(java.lang.Object);***

***public boolean equalsIgnoreCase(java.lang.String);***

***Note:***

***=>In realtime equals() method is used for User Authentication***

***process.***

***(b)Using 'compareTo()' method :***

***=>'compareTo()' method is also used to compare two Strings and***

***return integer value.***

***Method Signature:***

***public int compareTo(java.lang.String);***

***public int compareToIgnoreCase(java.lang.String);***

***Note:***

***=>In realtime compareTo() method is used in Sorting process***

***Ex\_Program : DemoString6.java***

***package maccess;***

***import java.util.\*;***

***public class DemoString6 {***

***public static void main(String[] args) {***

***Scanner s = new Scanner(System.in);***

***System.out.println("Enter the String1:");***

***String s1 = s.nextLine().trim();***

***System.out.println("Enter the String2:");***

***String s2 = s.nextLine().trim();***

***System.out.println("\*\*\*\*equals()\*\*\*\*");***

***boolean k = s1.equalsIgnoreCase(s2);***

***if(k) {***

***System.out.println("Strings are equal...");***

***}else {***

***System.out.println("Strings are Not-equal...");***

***}***

***System.out.println("\*\*\*\*compareTo()\*\*\*\*");***

***int z = s1.compareToIgnoreCase(s2);***

***if(z==0) {***

***System.out.println("Strings are equal...");***

***}else {***

***System.out.println("Strings are Not-equal...");***

***}***

***s.close();***

***}***

***}***

***o/p:***

***Enter the String1:***

***program***

***Enter the String2:***

***program***

***\*\*\*\*equals()\*\*\*\****

***Strings are equal...***

***\*\*\*\*compareTo()\*\*\*\****

***Strings are equal...***

***========================================================***