***Dt : 17/9/2022***

***Assignment:(Solution)***

***wap to read a String and display the sum of numbers from the given***

***String?***

***DemoString9.java***

***package maccess;***

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

***public class DemoString9 {***

***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 sum=0;***

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

***{***

***char ch = str.charAt(i);//char based on index***

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

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

***{***

***String st = String.valueOf(ch);//Char to String***

***int p = Integer.parseInt(st);//String to int***

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

***sum=sum+p;***

***}//end of if***

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

***System.out.println("\nSum of Numbers : "+sum);***

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

***}***

***}***

***o/p:***

***Enter the String:***

***java18 by 2022***

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

***Sum of Numbers : 15***

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

***Assignment :(Solution)***

***wap to read a String and append the following into Separate Buffer***

***objects?***

***StringBuffer ob1 - holds Vowels***

***StringBuffer ob2 - holds Consonents***

***StringBuffer ob3 - holds numbers***

***StringBuffer ob4 - Others***

***DemoString10.java***

***package maccess;***

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

***public class DemoString10 {***

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

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

***StringBuffer sb1 = new StringBuffer();***

***StringBuffer sb2 = new StringBuffer();***

***StringBuffer sb3 = new StringBuffer();***

***StringBuffer sb4 = new StringBuffer();***

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

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

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

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

***{***

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

***int k = (int)ch;***

***if((k>=65 && k<=90) || (k>=97 && k<=122))***

***{***

***switch(ch)***

***{***

***case 'a':***

***case 'A':***

***case 'e':***

***case 'E':***

***case 'i':***

***case 'I':***

***case 'o':***

***case 'O':***

***case 'u':***

***case 'U': sb1.append(ch+" ");***

***break;***

***default: sb2.append(ch+" ");***

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

***}***

***else if(k>=48 && k<=57)***

***{***

***sb3.append(ch+" ");***

***}***

***else***

***{***

***sb4.append(ch+" ");***

***}***

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

***System.out.println("Vowels : "+sb1.toString());***

***System.out.println("Consonents : "+sb2.toString());***

***System.out.println("Numbers : "+sb3.toString());***

***System.out.println("Others : "+sb4.toString());***

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

***}***

***}***

***o/p:***

***Enter the String:***

***java is 99% good in security for Web/Enterprise applications***

***Vowels : a a i o o i e u i o e E e i e a i a i o***

***Consonents : j v s g d n s c r t y f r W b n t r p r s p p l c t n s***

***Numbers : 9 9***

***Others : % /***

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

***Assignment:(Solution)***

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

***not,using pre-defined reverse() method?***

***DemoString11.java***

***package maccess;***

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

***public class DemoString11 {***

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

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

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

***String str1 = s.nextLine();***

***System.out.println("data in str1 : "+str1.toString());***

***StringBuffer sb = new StringBuffer(str1);***

***sb.reverse();***

***String str2 = new String(sb);***

***System.out.println("data in str2 : "+str2.toString());***

***if(str1.equals(str2)) {***

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

***}else {***

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

***}***

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

***}***

***}***

***o/p:***

***Enter the String:***

***program***

***data in str1 : program***

***data in str2 : margorp***

***Not-Palindrome String...***

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

***Assignment:(Solution)***

***wap to read a String and reverse the words from the given String?***

***DemoString12.java***

***package maccess;***

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

***public class DemoString12 {***

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

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

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

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

***StringTokenizer ob = new StringTokenizer(str," ");//ConCall***

***System.out.println("====Display reslt====");***

***while(ob.hasMoreTokens())***

***{***

***String tk=ob.nextToken();***

***StringBuffer sb = new StringBuffer(tk);***

***System.out.print(sb.reverse()+" ");***

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

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

***}***

***}***

***o/p:***

***Enter the String:***

***java language programming***

***====Display reslt====***

***avaj egaugnal gnimmargorp***

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

***Assignment(Solution)***

***Wap to read an String and break into tokens when the delimiter is***

***Vowel?***

***DemoString13.java***

***package maccess;***

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

***public class DemoString13 {***

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

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

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

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

***System.out.println("Enter the delimiter(break specification):");***

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

***char ch = dm.charAt(0);***

***switch(ch)***

***{***

***case 'a':***

***case 'A':***

***case 'e':***

***case 'E':***

***case 'i':***

***case 'I':***

***case 'o':***

***case 'O':***

***case 'u':***

***case 'U':***

***StringTokenizer ob = new StringTokenizer(str,dm);//ConCall***

***System.out.println("Count of tokens:"+ob.countTokens());***

***System.out.println("====Display tokens====");***

***while(ob.hasMoreTokens())***

***{***

***String tk=ob.nextToken();***

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

***System.out.println("Count of tokens:"+ob.countTokens());***

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

***break;***

***default:***

***System.out.println("delimiter is Not-Vowel...");***

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

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

***}***

***}***

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

***Dt : 19/9/2022***

***define Utility classes?***

***=>The Classes which are used to perform operations on other***

***objects are known as Utility classes.***

***Note:***

***=>StringTokenizer and StringJoiner classes are used to perform***

***operations on string objects.***

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

***\*imp***

***WrapperClasses in Java:***

***=>The pre-defined classes from java.lang package which are used***

***to make primitive datatypes available in the form of Objects,are***

***known as WrapperClasses.***

***=>Every Primitive Datatype will have its own WrapperClass and***

***there are 8-WrapperClasses.***

***=>The following is the list of WrapperClasses:***

***Data\_type Wrapper\_Class***

***byte Byte***

***short Short***

***int Integer***

***long Long***

***float Float***

***double Double***

***char Character***

***boolean Boolean***

***------------------------------------------------------***

***faq:***

***define Boxing process?***

***=>The process of binding primitive datatype values into WrapperClass***

***Objects is known as Boxing process.***

***=>To perform Boxing process we take the support of Constructors***

***=>The following is the list of Constructors from WrapperClasses:***

***Wrapper\_Class Constructors***

***Byte Byte(byte),Byte(String)***

***Short Short(short),Short(String)***

***Integer Integer(int),Integer(String)***

***Long Long(long),Long(String)***

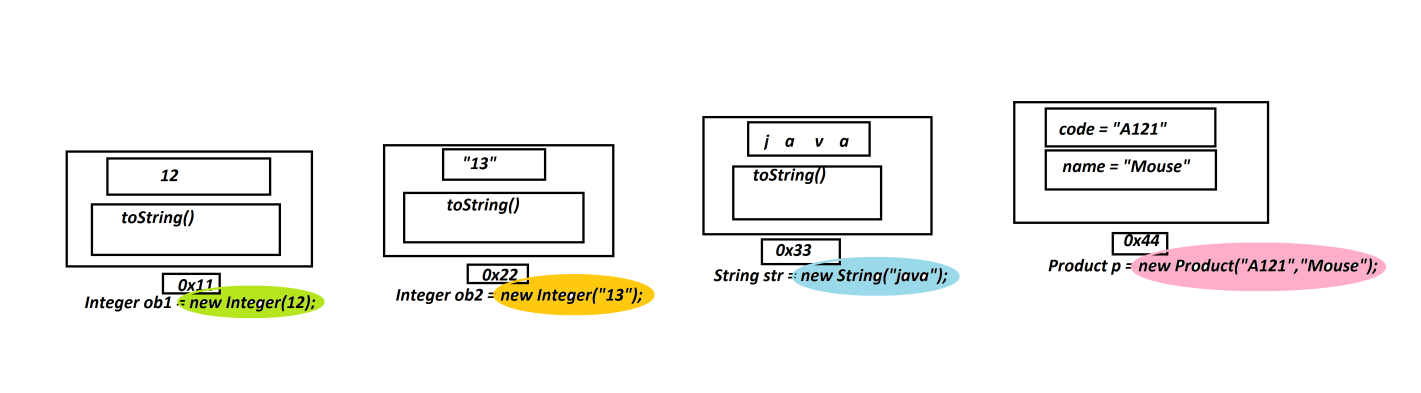
***Float Float(float),Float(Double),Float(String)***

***Double Double(double),Double(String)***

***Character Character(char)***

***Boolean Boolean(bolean),Boolean(String)***

***Diagram:***

******

***Ex\_program : DemoWrapperClass1.java***

***package maccess;***

***public class DemoWrapperClass1 {***

***@SuppressWarnings("removal")***

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

***//Boxing process***

***Integer ob1 = new ~~Integer~~(12);//Con\_Call***

***Integer ob2 = new ~~Integer~~("13");//Con\_Call***

***Float ob3 = new ~~Float~~(12.34F);//float\_value***

***Float ob4 = new ~~Float~~(123.45);//double\_vale***

***Float ob5 = new ~~Float~~("45.67F");//float in String***

***Character ob6 = new ~~Character~~('A');//char value***

***Boolean ob7 = new ~~Boolean~~(true);//boolean value***

***Boolean ob8 = new ~~Boolean~~("false");//boolean in String***

***System.out.println("====Display from Objects====");***

***System.out.println("ob1:"+ob1.toString());***

***System.out.println("ob2:"+ob2.toString());***

***System.out.println("ob3:"+ob3.toString());***

***System.out.println("ob4:"+ob4.toString());***

***System.out.println("ob5:"+ob5.toString());***

***System.out.println("ob6:"+ob6.toString());***

***System.out.println("ob7:"+ob7.toString());***

***System.out.println("ob8:"+ob8.toString());***

***}***

***}***

***o/p:***

***====Display from Objects====***

***ob1:12***

***ob2:13***

***ob3:12.34***

***ob4:123.45***

***ob5:45.67***

***ob6:A***

***ob7:true***

***ob8:false***

***---------------------------------------------------***

***faq:***

***define AutoBoxing process?***

***=>The boxing process which is performed automatically is known as***

***AutoBoxing process.***

***=>In AutoBoxing process the Primitive datatype values are assigned***

***to Non-Primitive datatype variables.***

***Ex : DemoWrapperClass2.java***

***package maccess;***

***public class DemoWrapperClass2 {***

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

***//AutoBoxing process***

***Integer ob1 = 12;***

***Float ob2 = 12.34F;***

***Character ob3 = 'A';***

***Boolean ob4 = true;***

***System.out.println("====Display from Objects====");***

***System.out.println("ob1:"+ob1.toString());***

***System.out.println("ob2:"+ob2.toString());***

***System.out.println("ob3:"+ob3.toString());***

***System.out.println("ob4:"+ob4.toString());***

***}***

***}***

***o/p:***

***====Display from Objects====***

***ob1:12***

***ob2:12.34***

***ob3:A***

***ob4:true***

***--------------------------------------------------------***

***faq:***

***define UnBoxing process?***

***=>The process of taking primitive datatype values outof WrapperClass***

***objects is known as UnBoxing process.***

***=>we use the following methods to perform UnBoxing process:***

***public byte byteValue();***

***public short shortValue();***

***public int intValue();***

***public long longValue();***

***public float floatValue();***

***public double doubleValue();***

***public char charValue();***

***public boolean booleanValue();***

***Ex : WrapperClass3.java***

***package maccess;***

***public class DemoWrapperClass3 {***

***@SuppressWarnings("removal")***

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

***//Boxing process***

***Integer ob1 = new ~~Integer~~(12);//Con\_Call***

***Float ob2 = new ~~Float~~(12.34F);//float\_value***

***Character ob3 = new ~~Character~~('A');//char value***

***Boolean ob4 = new ~~Boolean~~(true);//boolean value***

***//UnBoxing process***

***int i = ob1.intValue();***

***float f = ob2.floatValue();***

***char ch = ob3.charValue();***

***boolean bl = ob4.booleanValue();***

***System.out.println("====Display Values====");***

***System.out.println("i:"+i);***

***System.out.println("f:"+f);***

***System.out.println("ch:"+ch);***

***System.out.println("bl:"+bl);***

***}***

***}***

***o/p:***

***====Display Values====***

***i:12***

***f:12.34***

***ch:A***

***bl:true***

***----------------------------------------------------------------***

***faq:***

***define AutoUnBoxing process?***

***=>The UnBoxing process which is performed automatically is known as***

***AutoUnBoxing process.***

***=>In AutoUnBoxing process the NonPrimitive DataType variables are***

***assigned to Primitive Datatype variables.***

***Ex : DemoWrapperClass4.java***

***package maccess;***

***public class DemoWrapperClass4 {***

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

***//AutoBoxing process***

***Integer ob1 = 12;***

***Float ob2 = 12.34F;***

***Character ob3 = 'A';***

***Boolean ob4 = true;***

***//AutoUnBoxing process***

***int i = ob1;***

***float f = ob2;***

***char ch = ob3;***

***boolean bl = ob4;***

***System.out.println("====Display Values====");***

***System.out.println("i:"+i);***

***System.out.println("f:"+f);***

***System.out.println("ch:"+ch);***

***System.out.println("bl:"+bl);***

***}***

***}***

***o/p:***

***====Display Values====***

***i:12***

***f:12.34***

***ch:A***

***bl:true***

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