**JAVA**

**Introduction to Java**

**Lab Exercise No:** 1

/\* This program helps display Welcome to the world of Java using System.out.println method\*/

**package** com.hsbc.pack;

**public** **class** Welcome {

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

// **TODO** Auto-generated method stub

System.***out***.println("Welcome to the world of Java");

}

}

**Lab Exercise No:** 2

/\*This program takes a console input (Input given by the user while executing the

program in command line) and displays the same\*/

public class Solution2

{

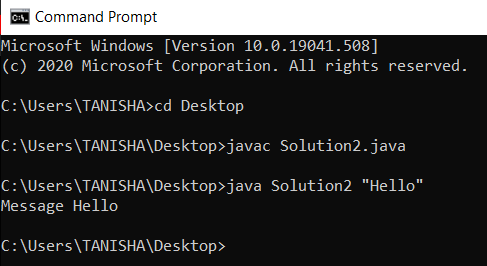
public static void main(String[]args)

{

System.out.println("Message "+args[0]);

}

}



**Lab Exercise No:** 3

/\* To demonstrate the different comments in java and its documentation\*/

//package name com.hsbc.pack

**package** com.hsbc.pack;

//Class Definition

**public** **class** Comments {

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

// **TODO** Auto-generated method stub

/\* Basic print statements printing

//welcome to the world of java

\*/

System.***out***.println("Welcome to the world of Java");

}//end of main method

}//end of class

**JAVA**

**Basic elements of Java**

**Lab Exercise No:** 4

/\* Declaring variables of int, float, double data types and a constant of

long data type and displaying all with an appropriate message\*/

**package** com.hsbc.pack;

**public** **class** Solution4 {

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

// **TODO** Auto-generated method stub

**int** ageToday=22;

**float** marksScored=99.5F;

**double** moneyPaid=50.5;

**final** **long** ID=2;

System.***out***.println("Age "+ageToday);

System.***out***.println("Marks obtained "+marksScored);

System.***out***.println("Money Paid "+moneyPaid);

System.***out***.println("ID is a constant and hence value cannot be changed "+ID);

}

}

**Lab Exercise No:** 5

/\*Program to get two numbers as input through command line and swap the values of

two numbers without using a temporary variable and display the same.\*/

**package** com.hsbc.pack;

**public** **class** Solution5 {

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

// **TODO** Auto-generated method stub

**int** x=Integer.*parseInt*(args[0]);

**int** y=Integer.*parseInt*(args[1]);

System.***out***.println(x);

System.***out***.println(y);

**if**(x>y)

{

x=x+y;

y=x-y;

x=x-y;

}

**else**

{

x=x+y;

y=y-x;

x=y-x;

}

System.***out***.println("After swapping");

System.***out***.println(x);

System.***out***.println(y);

}

**Lab Exercise No:** 6

/\*Program to determine whether the given year is leap year or not\*/

**package** com.hsbc.pack;

**public** **class** Solution6 {

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

// **TODO** Auto-generated method stub

**int** year=Integer.*parseInt*(args[0]);

**int** i=year%100;

**if**(i%4==0)

{

System.***out***.println("Leap");

}

**else**

{

System.***out***.println("Not Leap");

}

}

}

**Lab Exercise No:** 7

/\*a program to determine the largest of three numbers. \*/

**package** com.hsbc.pack;

**public** **class** Solution7 {

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

// **TODO** Auto-generated method stub

**int** a=Integer.*parseInt*(args[0]);

**int** b=Integer.*parseInt*(args[1]);

**int** c=Integer.*parseInt*(args[2]);

**if**(a>b && b>c)

{

System.***out***.println(a+" is greatest");

}

**else** **if**(b>a && a>c)

{

System.***out***.println(b+" is greatest");

}

**else**

{

System.***out***.println(c+" is greatest");

}

}

}

**Lab Exercise No:** 8

/\*A program to determine whether a number is a palindrome or not\*/

**package** com.hsbc.pack;

**public** **class** Solution8 {

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

// **TODO** Auto-generated method stub

String a=args[0];

String b="";

**for**(**int** i=0;i<a.length();i++)

{

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

b=ch+b;

}

**if**(a.equals(b))

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

**else**

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

}

}

**Lab Exercise No:** 9

/\*A program to display the Fibonacci series starting from 0 till 200\*/

**package** com.hsbc.pack;

**public** **class** Solution9 {

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

// **TODO** Auto-generated method stub

**int** a=0;

**int** b=1;

System.***out***.println(a);

System.***out***.println(b);

**int** c=a+b;

**for**(;c<198;c=a+b)

{

System.***out***.println(c);

a=b;

b=c;

}

}

}

**Lab Exercise No:** 10

/\*A program to declare a set of 5 words and reverse each word arranging the resulting words in alphabetical order and display the same\*/

**package** com.hsbc.pack;

**import** java.util.Arrays;

**public** **class** Solution10 {

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

// **TODO** Auto-generated method stub

String arr[]={"eggs","bread","butter","milk","cheese"};

**for**(**int** i=0;i<arr.length;i++)

{

StringBuilder sb=**new** StringBuilder(arr[i]);

arr[i]=sb.reverse().toString();

}

Arrays.*sort*(arr);

**for**(**int** i=0;i<arr.length;i++)

{

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

}

System.***out***.println();

}

}

**Lab Exercise No:** 11

/\*Write a program to arrange an array of elements in ascending order using selection sort

algorithm.\*/

**package** com.hsbc.pack;

**public** **class** Solution11 {

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

// **TODO** Auto-generated method stub

**int** arr[]= {5,1,7,6,9,2};

**for**(**int** i=0;i<arr.length-1;i++)

{

// Find the minimum element in unsorted array

**int** min\_idx = i;

**for** (**int** j = i+1; j < arr.length; j++)

**if** (arr[j] < arr[min\_idx])

min\_idx = j;

// Swap the found minimum element with the first

// element

**int** temp = arr[min\_idx];

arr[min\_idx] = arr[i];

arr[i] = temp;

}

System.***out***.println("Sorted");

**for**(**int** i=0;i<arr.length;i++)

{

System.***out***.println(arr[i]);

}

}

**Lab Exercise No:** 12

/\*An application that reads a series of pairs of numbers as follows:

a) Product number

b) Quantity sold

and calculates and displays the total retail value of all products sold\*/

**package** com.hsbc.pack;

**public** **class** Solution12 {

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

// **TODO** Auto-generated method stub

**int** p[]= {1,2,3};

**int** q[]= {3,6,7};

**double** retail\_Price=0;

**switch**(p[0])

{

**case** 1:

retail\_Price=q[0]\*22.50;

**break**;

**case** 2:

retail\_Price=q[1]\*44.50;

**break**;

**case** 3:

retail\_Price=q[2]\*9.98;

**break**;

**default**:

System.***out***.println("wrong choice");

}

System.***out***.println("Retail price "+retail\_Price);

}

}

**Lab Exercise No:** 13

/\*Program to display how many gross, how many dozen, and how many left over eggs the user has.\*/

**package** com.hsbc.pack;

**public** **class** Solution13 {

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

// **TODO** Auto-generated method stub

**int** x=1342;

**int** y=x/144;

**int** z=x%144;

**int** d=z/12;

**int** left=z%12;

System.***out***.println("Your number of eggs is "+y+"gross, "+d+"dozen, and "+left);

}

}