Day 1 Solutions

Solution 1:

package com.hsbc.pack;

public class Welcome {

public static void main(String args[]) {

System.out.println(“Welcome to the world of Java”); // printing output

}

}

Solution 2:

package com.hsbc.pack;

public class CommandLine {

   public static void main(String args[]) {

    for(int i = 0; i<args.length; i++) // traversing input from command line through loop

          System.out.println(“ “+ args[i]);

   }

}

Solution 3:

// printing value of a variable (this a a documentation comment)

package com.hsbc.pack;

public class CommentDemo{ // making of the class CommentDemo(this is a single line comment)

public static void main(String args[]) {

public int x=5; /\* decalre and // x=5 here (Nested Comment inside MultiLine)

print variable (Multi-Line comment)\*/

System.out.println(“x=”+x);

}

}

Solution 4:

package com.hsbc.pack;

public class DataTypes {

public static void main(String args[]) {

public int myNum = 50; // Integer (whole number)

public float myFloatNum = 555.99f; // Floating point number

public long myLongNum=15000000L; // Long DataType

public double myDoubleNum=12.88d; //Double DataType

System.out.println(“Integer variable value is=”+myNum);

System.out.println(“Float variable value is=”+myFloatNum);

System.out.println(“Long variable value is=”+myLongNum);

System.out.println(“Double variable value is=”+myDoubleNum);

}}

Solution 5:

package com.hsbc.pack;

public class CommandLine {

   public static void main(String args[]) {

    public int first=args[0]; // first argument stored in first variable

public int second=args[1]; // second argument stored in second variable

first=first+second;

second=first-second;

first=first-second;

System.out.println(“Swapped numbers are=”);

          System.out.println(“ “+ first + “ “ + second);

   }

}

Solution 6:

package com.hsbc.pack;

public class LeapYear {

public static void main(String args[]) {

public int year=args[0];

public boolean result;

result=(year%4==0 && year%100!=0) ? : (year%400 ==0 ) ?true : false; //logic

if(result==true){

System.out.println(“Leap year”);

}

else {

System.out.println(“Not leap year”);

}

}

}

Solution 7:

package com.hsbc.pack;

public class Largest{

public static void main(String[] args) {

int num1 = 10, num2 = 20, num3 = 7; // random inputs to test logic

if( num1 >= num2 && num1 >= num3) // testing first number is greatest or not

System.out.println(num1+" is the largest Number");

else if (num2 >= num1 && num2 >= num3) // testing second number is greatest or not

System.out.println(num2+" is the largest Number");

else

System.out.println(num3+" is the largest Number");

}

}

Solution 8:

package com.hsbc.pack;

public class Palindrome {

public static void main(String[] args) {

int num = 191, reversedNumber = 0, remainder, originalNumber;

originalNumber = num; // reversed integer is stored in variable

while( num != 0 )

{

remainder = num % 10;

reversedNumber = reversedNumber\* 10 + remainder;

num=num/ 10;

}

if (originalInteger == reversedNumber) /\* palindrome if orignalInteger and reversedInteger are equal \*/

System.out.println(originalNumber + " is a palindrome.");

else

System.out.println(originalNumber + " is not a palindrome.");

}

}

Solution 9:

package com.hsbc.pack;

import java.util.Scanner;

public class Fib

{

public static void main(String args[])

{

Scanner sc = new Scanner(System.in);

public int sum = 0;

public int n;

public int a = 0;

public int b = 1;

System.out.println("Enter the nth value: ");

n= sc.nextInt();

System.out.println("Fibonacci series: ");

while(sum <= n)

{

System.out.print(sum + " ");

a = b; // swap elements

b = sum;

sum = a + b; // next term is the sum of the last two terms

}

}

}

Solution 10:

package com.hsbc.pack;

import java.util.Scanner;

public class Words{

public static void main(String args[]){

public String arr[]={“aman”,”ruhika”,”utkarsh”,”navya”,”gaurav”};

public String[] arr1=new String[5];

public int k=0;

public string temp;

for(int I=0;i<5;I++) //reversing

{

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

sb.reverse();

arr1[k]=sb.toString();

k++;

}

for(int i=0;i<5;i++) //sorting of words

{

for(int j=i+1;j<5;j++)

{

if(arr1[I].compareTo(arr1[j]>0)

{

temp=arr1[i];

arr1[i]=arr1[j];

arr1[j]=temp;

}

}

}

System.out.println(“Strings in Sorted Way”);

for(int i=0;i<5;i++)

{

System.out.println(arr1[i] + “,”);

}

}

}

Solution 11:

// in selection sort smallest element is found in array then swapped with first element then the index is incremented

package com.hsbc.pack;

import java.util.Scanner;

class SelectionSort

{

    void sort(int arr[])

    {

       public int n = arr.length;

        for (int i = 0; i < n-1; i++)

        {

            int min\_idx = i;

            for (int j = i+1; j < n; j++)

                if (arr[j] < arr[min\_idx]) // condition for less value

                    min\_idx = j;

            int temp = arr[min\_idx]; //swapping the minimum found element with first element

            arr[min\_idx] = arr[i];

            arr[i] = temp;

        }

    }

    public static void main(String args[])

    {

        SelectionSort ob = new SelectionSort();

        int arr[] = {64,25,12,22,11};

        ob.sort(arr);

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

        int n = arr.length;

        for (int i=0; i<n; ++i)

            System.out.print(arr[i]+" "); //printing array

        System.out.println();

    }

}

Solution 12:

package com.hsbc.pack;

import java.util.Scanner;

public class Shopkeeper{

Scanner sc = new Scanner(System.in);

public float product1=22.50;

public float product2=44.50;

public float product3=9.98;

public int product;

System.out.println(“enter quantity of product 1 that was sold”);

int productQuantity1=sc.nextInt();

System.out.println(“enter quantity of product 2 that was sold”);

int productQuantity2=sc.nextInt();

System.out.println(“enter quantity of product 3 that was sold”);

int productQuantity3=sc.nextInt();

System.out.println(“enter product number”);

product=sc.nextInt();

switch(product){

case 1 : System.out.println(“Price is product 1 is=” + product1);

System.out.println(“Total Retail Price of product 1 is=” + productQuantity1\*product1); //calc total retail price

break;

case 2 : System.out.println(“Price is product 2 is=” + product1);

System.out.println(“Total Retail Price of product 2 is=” + productQuantity2\*product2);

break;

case 2 : System.out.println(“Price is product 3 is=” + product1);

System.out.println(“Total Retail Price of product 3 is=” + productQuantity3\*product3);

break;

default: System.out.println(“Wrong Input”); // if no input matches

}

}

}

Solution 13:

package com.hsbc.pack;

import java.util.Scanner;

public class Eggs{

Scanner sc = new Scanner(System.in);

System.out.println(“Enter number of eggs”);

int egg=sc.nextInt();

int gross=egg/144; // number of gross calculated

int leftoverAfterGross= egg%144; // calculating remainder after gross

int dozen= leftoverAfterGross/12;

int leftoverAfterDozen=dozen%12; //calculating remainder after dozen

System.out.println(“Gross=” + gross + “Dozen=” + dozen + “Leftovers=” + leftoverAfterDozen);

}}