//Solution 1:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//printing simple welcome message

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

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

System.***out***.println("Welcome \r\n" + "to the world of Java");

}

}

//Solution 2:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//print the input from console

**public** **class** MessageDisplay {

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

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

}

}

//Solution 3:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//This is a single line comment

/\* This

is a

multi-line

comment\*/

**public** **class** DemoComments {

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

System.***out***.println("Comments in Java");

}

/\*

\*// this is a nested comment

\*

\*/

}

//Solution 4:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Java program to demonstrate

// data types in Java

**public** **class** ShowData {

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

**int** i = 19;

**float** f = 4.7333434f;

**double** d = 4.5345635;

**final** **long** LG= 20000;

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

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

System.***out***.println("double: " + d);

System.***out***.println("long const: " + LG);

}

}

//Solution 5:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//code to swap variables

**import** java.util.Scanner;

**public** **class** SwapNumber {

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

**int** x, y;

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

System.***out***.print("Enter the first number:");

x = s.nextInt();

System.***out***.print("Enter the second number:");

y = s.nextInt();

System.***out***.println("value of x:" + x);

System.***out***.println("value of y:" + y);

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

x = x + y;

y = x - y;

x = x - y;

System.***out***.println("value of x:" + x);

System.***out***.println("value of y:" + y);

s.close();

}

}

//Solution 6:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//code to check if give year is a leap year

**import** java.util.Scanner;

**public** **class** LeapYear {

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

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

System.***out***.print("Enter any year:");

**int** year = s.nextInt();

**boolean** flag = **false**;

**if**(year % 400 == 0)

{

flag = **true**;

}

**else** **if** (year % 100 == 0)

{

flag = **false**;

}

**else** **if**(year % 4 == 0)

{

flag = **true**;

}

**else**

{

flag = **false**;

}

**if**(flag)

{

System.***out***.println("This is a Leap Year");

}

**else**

{

System.***out***.println("This is not a Leap Year");

}

s.close();

}

}

//Solution 7:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Code to find largest of three numbers

**import** java.util.Scanner;

**public** **class** Findlargest{

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

{

**int** firstNum, secondNum, thirdNum;

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

System.***out***.print("Enter the first number:");

firstNum = s.nextInt();

System.***out***.print("Enter the second number:");

secondNum = s.nextInt();

System.***out***.print("Enter the third number:");

thirdNum = s.nextInt();

**if**(firstNum > secondNum && firstNum > thirdNum)

{

System.***out***.println("Largest number is:"+firstNum);

}

**else** **if**(secondNum > thirdNum)

{

System.***out***.println("Largest number is:"+secondNum);

}

**else**

{

System.***out***.println("Largest number is:"+thirdNum);

}

s.close();

}

}

//Solution 8:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//java code to check if given number is Palindrome

**import** java.util.Scanner;

**public** **class** CheckPalindrome {

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

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

System.***out***.print("Input a number: ");

**int** n = s.nextInt();

**int** sum = 0, r;

**int** temp = n;

**while**(n>0)

{

r = n % 10;

sum = (sum\*10)+r;

n = n/10;

}

**if**(temp==sum)

System.***out***.println("It is a Palindrome number.");

**else**

System.***out***.println("Not a palindrome");

s.close();

}

}

//Solution 9:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//Print fibonacci series till given number

**public** **class** PrintFibonacci {

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

**int** n = 200, t1 = 0, t2 = 1;

**while** (t1 <= n)

{

System.***out***.print(t1+"\n");

**int** sum = t1 + t2;

t1 = t2;

t2 = sum;

}

}

//Solution 10:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//Java code to reverse each string and sort the resulting array

**import** java.util. Arrays;

**public** **class** ReverseStrings{

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

String stringArray[] = **new** String [] {"hello","this","is","suyog","khochikar"};

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

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

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

}

Arrays.*sort*(stringArray);

**for**(String string : stringArray) {

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

}

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

}

}

//Solution 11:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Java program for implementation of Selection Sort

**public** **class** SelectionSort{

**void** sort(**int** arr[]){

**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])

min\_idx = j;

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

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

arr[i] = temp;

}

}

**void** printArray(**int** arr[]){

**int** n = arr.length;

**for** (**int** i=0; i<n; ++i)

System.***out***.print(arr[i]+" ");

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

}

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

Solution5 ob = **new** Solution5();

**int** arr[] = {20,14,34,46,6};

ob.sort(arr);

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

ob.printArray(arr);

}

}

//Solution 12:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//java code to return product price using Switch case

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

**static** **double** priceGetter(**int** productNumber){

**double** price = 0 ;

**switch**(productNumber) {

**case** 1 : {

price = 22.50;

**break**;

}

**case** 2 : {

price = 44.50;

**break**;

}

**case** 3: {

price = 9.98;

**break**;

}

}

**return** price;

}

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

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

**double** totalPrice = 0;

**int** i = 0;

**while**(i < args.length){

totalPrice += *priceGetter*(Integer.*parseInt*(args[i])) \* Integer.*parseInt*(args[i+1]);

i += 2;

}

System.***out***.println("Total Retail Value of all sold products is " + totalPrice);

}

}

//Solution 13:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//java code to divide total number

//of eggs into categories

**import** java.util.Scanner;

**public** **class** EggDivide{

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

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

System.***out***.print("Enter total number of eggs:");

**int** originalEggs = s.nextInt();

**int** gross,dozen,remainingEggs;

gross = originalEggs/144;

dozen = (originalEggs%144)/12;

remainingEggs = (originalEggs%144)%12;

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

s.close();

}

}