1)package assignments;

public class Armstrong {

public static void main(String[] args) {

int num = 153, ornum, rem, res = 0;

ornum = num;

while (ornum != 0)

{

rem = ornum % 10;

res += Math.pow(rem, 3);

ornum /= 10;

}

if(res == num)

System.out.println(num + " is an Armstrong number.");

else

System.out.println(num + " is not an Armstrong number.");

}

}

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2)package assignments;

public class Armstrong {

public static void main(String[] args) {

int low = 100, high = 999;

for(int number = low + 1; number < high; ++number) {

int num = 0;

int res = 0;

int ornum = number;

// number of digits calculation

while (ornum != 0) {

ornum/= 10;

++num;

}

ornum= number;

// result contains sum of nth power of its digits

while (ornum != 0) {

int rem = ornum % 10;

res += Math.pow(rem, num);

ornum /= 10;

}

if (res == number)

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

}

}

}

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3)import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

System.out.print("Enter Principal: ");

double p = in.nextDouble();

System.out.print("Enter Rate: ");

double r = in.nextDouble();

System.out.print("Enter Time: ");

int t = in.nextInt();

double si = p \* r \* t / 100.0;

double cAmt = (p \* Math.pow(1 + (r / 100), t));

double ci = cAmt - p;

double diff = Math.abs(si - ci);

System.out.println("Simple interest = " + si);

System.out.println("Compound interest = " + ci);

System.out.println("Absolute Difference = " + diff);

in.close();

}

}

4)

**import** java.util.Scanner;

**public** **class** Marks {

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

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

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

System.***out***.println("Enter the marks for the first subject");

**int** s1 = ip.nextInt();

System.***out***.println("Enter the marks for the second subject");

**int** s2 = ip.nextInt();

System.***out***.println("Enter the marks for the third subject");

**int** s3 = ip.nextInt();

**if** (s1 > 60 && s2 > 60 && s3 > 60) {

System.***out***.println("Result is Passed");

}

**if** (s1 > 60 && s2 > 60){

System.***out***.println("Result is Promoted");

}

**else** **if** (s1 > 60 && s3 > 60) {

System.***out***.println("Result is Promoted");

}

**else** **if** (s2 > 60 && s3 > 60) {

System.***out***.println("Result is Promoted");

}

**else** {

System.***out***.println("Result Failed");

}

}

}

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5)

import java.util.Scanner;

class Main

{

public static void main(String args[])

{

double tax=0,it;

Scanner sc=new Scanner(System.in);

System.out.println("Enter income ");

it=sc.nextDouble();

if(it<=180000)

tax=0;

else if(it<=300000)

tax=0.2\*(it-180000);

else if(it<=500000)

tax=(0.3\*(it-300000))+(0.1\*100000);

else if(it<=1000000)

tax=(0.3\*(it-500000))+(0.2\*200000)+(0.1\*100000);

else

tax=(0.4\*(it-1000000))+(0.3\*500000)+(0.2\*200000)+(0.1\*100000);

System.out.println("Income tax amount is "+tax);

}

}

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6) **import** java.util.Scanner;

**public** **class** login {

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

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

System.***out***.println("Welcome to Login page");

System.***out***.println("Please enter your login ID");

String lid = ip.nextLine();

System.***out***.println("Please enter your Password");

String pass = ip.nextLine();

**if** (lid != "admin" || pass != "admin") {

**for**(**int** i = 0; i > 2; i++) {

System.***out***.println("Wrong email ID or Password, attempts left: "+ i);

}

}**else** {

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

}

}

}

7)

import java.util.Arrays;

class index {

public static void main(String[] args) {

int[] num = {1, 2, 3, 4, 5};

int toFind = 3;

boolean found = false;

for (int n : num) {

if (n == toFind) {

found = true;

break;

}

}

if(found)

System.out.println(toFind + " is found.");

else

System.out.println(toFind + " is not found.");

}

}

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8) public class BubbleSortExample {

static void bubbleSort(int[] arr) {

int n = arr.length;

int temp = 0;

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

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

if(arr[j-1] > arr[j]){

//swap elements

temp = arr[j-1];

arr[j-1] = arr[j];

arr[j] = temp;

}

}

}

}

public static void main(String[] args) {

int arr[] ={5,12,14,6,78,19,1,23,26,35,37,7,52,86,47};

System.out.println("Array Before Bubble Sort");

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

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

}

System.out.println();

bubbleSort(arr);//sorting array elements using bubble sort

System.out.println("Array After Bubble Sort");

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

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

}

}

}

9)

import java.util.\*;

public class Main

{

// Main driver method

public static void main(String args[])

{

// Taking input from user

Scanner sc = new Scanner(System.in);

int n; //Declaring Variables

//Ask the user to enter the Array Size

System.out.println("Enter the total subjects ");

n=sc.nextInt();

//Declare the array

int arr[] = new int[n];

System.out.println("Enter the marks secured in each subject ");

for(int i=0;i<n;i++) //Initialize the array

{

arr[i]=sc.nextInt();

}

int total=0;

//Calculate the total marks

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

{

total=total+arr[i];

}

//Display the total marks

System.out.println("The total marks obtained is "+total);

//Calculate the percentage

float percentage;

percentage = (total / (float)n);

//Display the total percentage

System.out.println( "Total Percentage : " + percentage + "%");

}

}