JAVA ASSIGNMENT 1

1)

**public** **class** armstrong

{

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

{

**int** n= 153, original, a, sum = 0;

original = n;

**while**(n > 0)

{

a = n % 10;

n = n / 10;

sum = sum + (a \* a \* a);

}

**if**(sum == original)

{

System.***out***.println("it is an armstrong number");

}

**else**

{

System.***out***.println("it is not an armstrong number");

}

sum = 0;

}

}

2)

**public** **class** armstrong

{

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

{

**int** n, a, sum = 0;

System.***out***.print("Armstrong numbers from 100 to 999:");

**for**(**int** i = 100; i <= 999; i++)

{

n = i;

**while**(n > 0)

{

a = n % 10;

n = n / 10;

sum = sum + (a \* a \* a);

}

**if**(sum == i)

{

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

}

sum = 0;

}

}

}

3)

**import** java.util.Scanner;

**public** **class** simpleintcmpdint {

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

{

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

**double** principal, rate, years, sim, com;

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

principal = input.nextDouble();

System.***out***.println("Enter the rate of interest:");

rate = input.nextDouble();

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

years = input.nextInt();

sim = (principal\*rate\*years)/100;

com = principal \* Math.*pow*(1.0+rate/100.0,years) - principal;

System.***out***.println("compound interest is:" +com);

System.***out***.println("simple interest is:" +sim);

}

}

4)

**public** **class** marks

{

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

{

**int** eng = 92, maths = 85, sst = 50;

**if**(eng > 60 && maths > 60 && sst > 60)

{

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

}

**else** **if**(eng > 60 && maths > 60 || sst > 60 && eng > 60 || maths > 60 && sst > 60)

{

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

}

**else**

{

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

}

}

}

5)

**import** java.util.Scanner;

**public** **class** IncomeTax

{

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

{

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

**double** tax=0, income;

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

income=input.nextDouble();

**if**(income<=180000)

tax = 0;

**else** **if**(income<=300000)

tax = 0.1;

**else** **if**(income<=500000)

tax = 0.2;

**else** **if**(income<=1000000)

tax = 0.3;

System.***out***.println("Income tax amount is "+tax\*100+"%");

}

}

6)

**import** java.util.Scanner;

**public** **class** GUIapp

{

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

{

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

String login,password;

**int** i=1;

**while**(i<3)

{

String username="nikita";

String pass = "niki";

System.***out***.println("enter loginId: ");

login = input.nextLine();

System.***out***.println("enter password: ");

password = input.nextLine();

**if**(login.equals(username) && password.equals(pass))

{

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

**break**;

}

**else**

{

i=i+1;

}

}

**if**(i==4)

System.***out***.println("contact admin");

}

}

7)

**import** java.util.Arrays;

**public** **class** searchArrayy

{

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

{

**int** item=19;

**int** index =0;

**int** i;

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

**for**(i=0;i<10;i++)

**if**(item==arr[i])

{

index=i;

}

System.***out***.println("element was found at " +index+ " index");

}

}

8)

**public** **class** bubblesort

{

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

{

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

**int** i,j, temp;

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

{

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

{

**if**(arr[j] > arr[j+1])

{

temp = arr[j+1];

arr[j+1]=arr[j];

arr[j]= temp;

}

}

}

System.***out***.println("sorted list is:");

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

{

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

}

}

}

9)

**import** java.util.Scanner;

**public** **class** TotnAvg

{

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

{

**int**[][] marks = **new** **int**[3][3];

**int** sum=0;

**double** avg=0;

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

System.***out***.println("Enter marks:");

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

{

**for** (**int** j=0;j<marks[i].length;j++)

{

marks[i][j]=input.nextInt();

sum=sum+marks[i][j];

}

}

avg = sum/9;

System.***out***.println("sum of all subj is: " +sum+ " and avg is: " +avg );

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

{

sum=0;

avg=0;

**for** (**int** j=0;j<marks[i].length;j++)

{

sum=sum+marks[j][i];

}

System.***out***.println("sum of marks of: " +(i+1)+ " subject is: " +sum );

avg=sum/(marks[i].length);

System.***out***.println("avg of marks of: " +(i+1)+ " subject is: " +avg );

}

}

}