1. **To find Armstrong number**

**package** lasya;

**import** java.util.Scanner;

**public** **class** Armstrong {

**private** **static** Scanner *sc*;

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

**int** Number, Temp, Reminder, Times = 0;

**double** Sum = 0;

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

System.***out***.println("\n Please Enter number to Check : ");

Number = *sc*.nextInt();

Temp = Number;

**while** (Temp != 0) {

Times = Times + 1;

Temp = Temp / 10;

}

Temp = Number;

**while**( Temp > 0) {

Reminder = Temp %10;

Sum = Sum + Math.*pow*(Reminder, Times);

Temp = Temp /10;

}

System.***out***.format("\n Sum of entered is = %.2f", Sum);

**if** (Sum == Number) {

System.***out***.format("\n% d is a Armstrong", Number);

}

**else** {

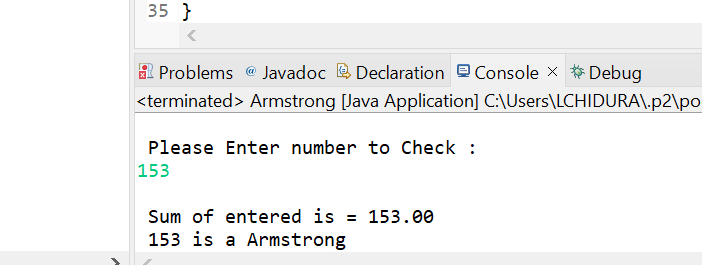
System.***out***.format("\n% d is NOT", Number);

}

}

}

Output:



1. **To find Armstrong number from 100 to 999**

**package** lasya;

**public** **class** Armstrong100

{

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

{

**for** (**int** k = 100 ; k <= 1000 ; k++)

{

**int** n = k;

**int** d = 0;

**int** s = 0;

**while** (n > 0)

{

d = n % 10;

s = s + (d \* d \* d);

n = n / 10;

}

**if** (k == s)

{

System.***out***.println (k + " is Armstrong number");

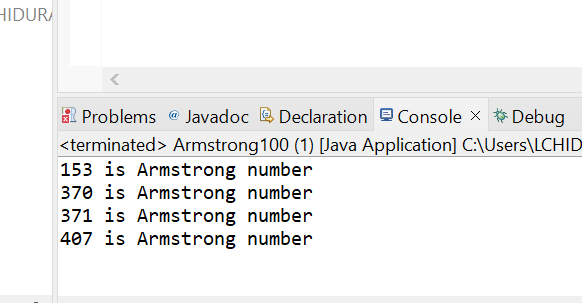
}

}

}

}

Output:



1. **To find compound interest**

**package** lasya;

**import** java.util.Scanner;

**class** Main1 {

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

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

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

**double** principal = input.nextDouble();

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

**double** rate = input.nextDouble();

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

**double** time = input.nextDouble();

System.***out***.print("Enter number of times interest is compounded: ");

**int** number = input.nextInt();

**double** interest = principal \* (Math.*pow*((1 + rate/100), (time \* number))) - principal;

System.***out***.println("Principal: " + principal);

System.***out***.println("Interest Rate: " + rate);

System.***out***.println("Time Duration: " + time);

System.***out***.println("Number of Time interest Compounded: " + number);

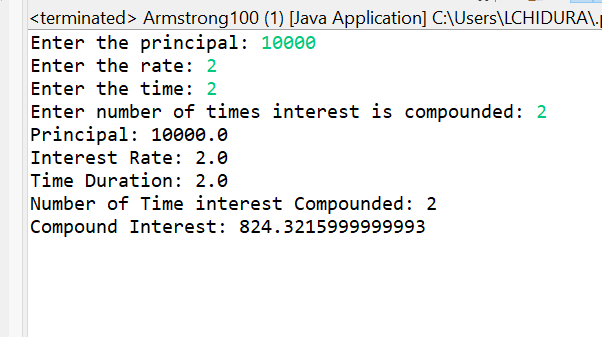
System.***out***.println("Compound Interest: " + interest);

input.close();

}

}

Output:



1. **Package lasya**;

**import** java.util.\*;

**public** **class** marks {

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

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

**int** subjects;

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

subjects=sc.nextInt();

**int** arr[] = **new** **int**[subjects];

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

**int** index =0;

**for**(;index<arr.length;index++)

{

arr[index]=sc.nextInt();

}

**if**(arr[index]>60 == **true**) {

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

}

}

}

Average

**package** Single;

**import** java.util.\*;

**public** **class** Average {

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

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

**float** marks1, marks2, marks3;

**float** sum = 0;

**float** avg = 0;

// take three numbers

System.***out***.print("Enter marks of the student A, B, C: ");

marks1 = scan.nextFloat();

marks2 = scan.nextFloat();

marks3 = scan.nextFloat();

sum = marks1 + marks2 + marks3;

System.***out***.println("sum : "+ sum);

avg = sum/3;

System.***out***.println("Average : " + avg);

}

}

Tax

**package** Single;

**import** java.util.\*;

**public** **class** Tax {

**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=0.1\*(it-180000);

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

tax=(0.2\*(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);

}

}