## Java Programs to Find the Sum of Digits of a Number

There are the following ways to find the sum of digits of a number:

**import** java.util.Scanner;

**public** **class** SumOfDigitsExample1

{

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

{

**int** number, digit, sum = 0;

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

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

number = sc.nextInt();

**while**(number > 0)

{

digit = number % 10;

sum = sum + digit;

number = number / 10;

}

//prints the result

System.out.println("Sum of Digits: "+sum);

}

}

**Output:**

Enter the number: 876

Sum of Digits: 21

## Reverse a Number using a while loop in Java

class Main {

public static void main(String[] args) {

int num , reversed = 0;

Scanner sc = new Scanner(System.in);

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

num = sc.nextInt();

System.out.println("Original Number: " + num);

// run loop until num becomes 0

while(num != 0) {

// get last digit from num

int digit = num % 10;

reversed = reversed \* 10 + digit;

// remove the last digit from num

num /= 10;

}

System.out.println("Reversed Number: " + reversed);

}

}

**Output:**

Enter the number: 876

Sum of Digits: 678

## Factorial Program using loop in java

Let's see the factorial Program using loop in java.

**class** FactorialExample{

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

**int** i,fact=1;

**int** number=5;//It is the number to calculate factorial

**for**(i=1;i<=number;i++){

      fact=fact\*i;

  }

  System.out.println("Factorial of "+number+" is: "+fact);

 }

}

## Java Decimal to Binary conversion: Custom Logic

We can convert **decimal to binary in java** using custom logic.

**public** **class** DecimalToBinaryExample2{

**public** **static** **void** toBinary(**int** decimal){

**int** binary[] = **new** **int**[40];

**int** index = 0;

**while**(decimal > 0){

       binary[index++] = decimal%2;

       decimal = decimal/2;

     }

**for**(**int** i = index-1;i >= 0;i--){

       System.out.print(binary[i]);

     }

System.out.println();//new line

}

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

System.out.println("Decimal of 10 is: ");

toBinary(10);

System.out.println("Decimal of 21 is: ");

toBinary(21);

System.out.println("Decimal of 31 is: ");

toBinary(31);

}}

Output:

Decimal of 10 is:

**1010**

**Decimal of 21 is:**

**10101**

**Decimal of 31 is:**

**11111**

**public** **class** DecimalToBinaryExample1{

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

System.out.println(Integer.toBinaryString(10));

System.out.println(Integer.toBinaryString(21));

System.out.println(Integer.toBinaryString(31));

}}