DAY-1

1. Write a program to declare two variables num and n and take an input duringcompilation time to check whether the nth bit of the given number is set (1) or not (0).

Solution:

import java.util.Scanner;

public class CheckNthBit {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

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

int num = scanner.nextInt();

System.out.print("Enter the value of n: ");

int n = scanner.nextInt();

if (((num >> n) & 1) == 1) {

System.out.println("The " + n + "th bit of " + num + " is set (1).);

} else {

System.out.println("The " + n + "th bit of " + num + " is not set (0).");

}

scanner.close();

}

}

Output:

Enter the number: 2

Enter the value of n: 4

The 4th bit of 2 is not set (0).

2. Write a program to input two numbers and find the maximum between two numbers using the conditional/ternary operator.

Solution:

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

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

int num1 = scanner.nextInt();

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

int num2 = scanner.nextInt();

int max = (num1 > num2) ? num1 : num2;

System.out.println("The maximum between " + num1 + " and " + num2 + " is: " + max);

scanner.close();

}

}

Output:

Enter the first number: 2

Enter the second number: 4

The maximum between 2 and 4 is: 4