Loop & Branching - Java Challenges & Code

1. Print multiplication table for a number

import java.util.Scanner;

public class MultiplicationTable {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

int num = sc.nextInt();

for (int i = 1; i <= 10; i++) {

System.out.println(num + " x " + i + " = " + (num \* i));

}

}

}

2. Use break and continue in loops

public class BreakContinueExample {

public static void main(String[] args) {

for (int i = 1; i <= 10; i++) {

if (i == 5)

continue;

if (i == 8)

break;

System.out.println(i);

}

}

}

3. Find factorial of a number

import java.util.Scanner;

public class Factorial {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

int num = sc.nextInt();

long fact = 1;

for (int i = 1; i <= num; i++) {

fact \*= i;

}

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

}

}

4. Print Fibonacci series

import java.util.Scanner;

public class FibonacciSeries {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

int count = sc.nextInt();

int a = 0, b = 1;

System.out.print("Fibonacci: " + a + " " + b + " ");

for (int i = 2; i < count; i++) {

int c = a + b;

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

a = b;

b = c;

}

}

}

5. Find sum of even numbers from 1 to 100

public class SumEvenNumbers {

public static void main(String[] args) {

int sum = 0;

for (int i = 2; i <= 100; i += 2) {

sum += i;

}

System.out.println("Sum of even numbers from 1 to 100: " + sum);

}

}