### **1. Check if sum of a+b > c+d**

public class CompareSum {

public static void main(String[] args) {

int a = 10, b = 20, c = 5, d = 15;

if ((a + b) > (c + d)) {

System.out.println ("Sum of a and b is greater than sum of c and d.");

}

}

}

### **2. Check if a number is even**

### public class EvenCheck {

public static void main(String[] args) {

int num = 6;

if (num % 2 == 0) {

System.out.println(num + " is even.");

}

}

}

### **3. Print characters from A to Z**

public class PrintAlphabets {

public static void main(String[] args) {

for (char ch = 'A'; ch <= 'Z'; ch++) {

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

}

}

}

### **4. Swap two numbers**

public class SwapNumbers {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

int x = sc.nextInt();

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

int y = sc.nextInt();

// Using third variable

int temp = x;

x = y;

y = temp;

System.out.println("After swapping: x = " + x + ", y = " + y);

}

}

**5. Check if a number is prime**

public class PrimeCheck {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

int num = sc.nextInt();

boolean isPrime = true;

if (num <= 1) {

isPrime = false;

} else {

for (int i = 2; i <= num / 2; i++) {

if (num % i == 0) {

isPrime = false;

break;

}

}

}

if (isPrime) {

System.out.println(num + " is prime.");

} else {

System.out.println(num + " is not prime.");

}

}

**6. Factorial of a number**

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 of " + num + " = " + fact);

sc.close();

}

}

**7. Length of a string**

public class StringLength {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

String msg = sc.nextLine();

System.out.println("Length of the string: " + msg.length());

sc.close();

}

}

### **8. Print “Welcome to Guvi” 10 times**

public class WelcomePrint {

public static void main(String[] args) {

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

System.out.println("Welcome to Guvi");

}

}

}

### **9. Check if person is a senior citizen**

public class SeniorCitizenCheck {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

int age = sc.nextInt();

if (age >= 60) {

System.out.println("The person is a senior citizen.");

} else {

System.out.println("The person is not a senior citizen.");

}

sc.close();

}

}

**10. Count number of digits in an integer**

public class DigitCount {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter an integer: ");

int num = sc.nextInt();

int count = String.valueOf(Math.abs(num)).length();

System.out.println("Number of digits: " + count);

sc.close();

}

}