Write a java program to count all the prime and composite numbers entered by the user.

CODE:

import java.util.Scanner;

public class PrimeCompositeCounter {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

int primeCount = 0;

int compositeCount = 0;

System.out.println("Enter numbers (enter -1 to stop):");

while (true) {

int num = scanner.nextInt();

if (num == -1) {

break; // Stop taking input if -1 is entered

}

if (isPrime(num)) {

primeCount++;

} else {

compositeCount++;

}

}

System.out.println("Prime numbers entered: " + primeCount);

System.out.println("Composite numbers entered: " + compositeCount);

}

// Function to check if a number is prime

public static boolean isPrime(int num) {

if (num <= 1) {

return false;

}

for (int i = 2; i <= Math.sqrt(num); i++) {

if (num % i == 0) {

return false;

}

}

return true;

}

}

OUTPUT:

C:\javap>javac PrimeCompositeCounter.java

C:\javap>java PrimeCompositeCounter

Enter numbers (enter -1 to stop):

7 5 6 4 -1

Prime numbers entered: 2

Composite numbers entered: 2

