

COUNTER CONTROLLED LOOP

//Genesis Grant, CTEC 120, CW1 Week 8, Counter Controlled While Loop Program

```
import java.util.*;
public class Main {
    static Scanner input = new Scanner (System.in);
    public static void main(String[] args) {

        //Declaring variables
        int number;
        int counter = 0; // loop control variable
        int sum = 0;

        //Beginning counter controlled loop
        while (counter < 5)
        { //begin counter while

            //Getting user numbers
            System.out.println("Please enter a number: ");
            number = input.nextInt();

            //Finding sum
            sum = sum + number;

            //Updating loop control variable, counter = counter + 1
            counter++;

        } //end counter while

        System.out.println("Sum = " + sum);

    }
}
```

SENTINEL CONTROLLED LOOP

//Genesis Grant, CTEC 120, CW1 WEEK5, SENTINEL CONTROLLED WHILE LOOP

```
import java.util.*;
public class Main {

    //variables that will not change throughout the program
    static Scanner input = new Scanner(System.in);
    static final int SENTINEL = -999;

    public static void main(String[] args) {

        //Declaring variables
        int number;
```

```

int sum = 0;
int counter = 0;

//Instructing user and getting input
System.out.println("Please enter as many numbers as you'd like and we will find
the sum.");
System.out.println("When you are finished inputting numbers, enter -999: ");

number = input.nextInt();

//Begin Sentinel Controlled loop
while(number != SENTINEL)
{
    sum = sum + number;

    //Updating loop control variable

    System.out.println("Enter a number: ");
    number = input.nextInt();

    //How many times user entered a number
    counter++;
}
System.out.println("You entered " + counter + " numbers.");
System.out.println("The sum of the values you entered is: " + sum);
}
}

```