Title: Counter Controlled While Loop

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Date: October 8

Course & Section: CSC 109-101W

Description: Prompts for a series of numbers and keeps track of running totals of odd values and of even values. Then displays the odd running total and the even running total.

Initial Algorithm:

1. Get how many numbers to input
2. Get number
3. Increase counter
4. Calculate running totals of odd and even numbers
5. Display the running totals when enough numbers are entered

Data Requirements:

Input:

- Ending value
- Entered number

Output:

- Odd total
- Even total

Additional Data:

- Counter

Formulas:

- Counter = Counter + 1
- Odd total = Odd total + Entered number
- Even total = Even total + Entered number

Flowchart:

```
        ┌─────────────┐
        │   Begin     │
        └─────────────┘
               │
               ▼
  ┌──────────────────────────────┐
  │   Initialize Counter = 0      │
  │  Initialize Entered number = 0│
  └──────────────────────────────┘
               │
               ▼
  ┌──────────────────────────────┐
  /      Input Ending value        /
  └──────────────────────────────┘
               │
```

False

WHILE (Counter < Ending value)

True

Input Entered value

Increment Counter:
Counter = Counter + 1

Loop back

IF Entered value is odd THEN

True

Compute Odd running total
Odd total = Odd total + Entered value

False

Compute Even running total
Even total = Even total + Entered value

END IF

END WHILE

Display Odd total

Display Even total

End