Visual Basic   Name -
Writing While Loops Worksheet #2   Period -

Write the following code segments. You can assume that `sum` has been declared as an `Integer` and is initialized to zero in each exercise. But you must declare and initialize any other variables that you use. **Trace the code segments as well with columns for each variable along the right edge of the worksheet.**

1. Write a code segment that uses a `While` loop to add up the integers from 1 to 3 storing the total in the variable `sum`.

```
Dim num As Integer = 1
Dim sum As Integer = 0
```
<u>num</u>   <u>sum</u>

2. Write a code segment that uses a `While` loop to add up the integers from 13 to 16 storing the total in the variable `sum`.

```
Dim num As Integer = 13
Dim sum As Integer = 0
```
<u>num</u>   <u>sum</u>

3. Write a code segment that uses a `While` loop to add up all the integers that are **multiples of 5** from 15 to 30 storing the total in the variable `sum`.

```
Dim num As Integer = 15
Dim sum As Integer = 0
```
<u>num</u>   <u>sum</u>

4. Write a code segment that uses a `While` loop to allow the user to input integers into an `InputBox` until he/she inputs the sentinel value 0. Store the running total of the inputs into a variable named `sum`. **Assume the user inputs 3, -5, 10 and 0.**

```
Dim num As Integer =
Dim sum As Integer =
```
<u>num</u>   <u>sum</u>