CHAPTER 7

USING THE `while` STATEMENT

The answers for the Using the `while` Statement section are located at the end of the section.

1. Write a pretest loop that adds together the integers from 10 through 100. Use an `int` variable named `num` to keep track of the integers, and use an `int` variable named `sum` to store the sum of the integers. The `num` variable was initialized to 10 when it was declared. The `sum` variable was initialized to 0 when it was declared. Use the `while` statement.

2. Write a `while` clause that will stop the pretest loop when the value in the `inStock` variable is less than or equal to the value in the `reorder` variable.

3. A `char` variable named `letter` contains an uppercase letter. Write a `while` clause that processes the loop instructions as long as the variable's value is either Y or T.

4. Write a pretest loop that adds together the integers 5, 15, 25, 35, 45, 55, 65, 75, 85, and 95. Use an `int` variable named `num` to keep track of the integers. Store the sum in an `int` variable named `sum`. The `num` variable was initialized to 5 when it was declared. The sum variable was initialized to 0 when it was declared. Use the `while` statement.

5. Write a pretest loop that displays the numbers .05, .06, .07, .08, .09, .10, .11, .12, .13, .14, and .15. Use the `num` variable to keep track of the numbers. The variable has the `double` data type and was initialized to .05 when it was created. Use the `while` statement.

ANSWERS FOR THE USING THE `while` STATEMENT SECTION

1.
```
while (num <= 100)
{
     sum += num;
     num += 1;
}  //end while
```
2.
```
while (inStock > reorder)
```
3.
```
while (letter == 'Y' || letter == 'T')
```
4.
```
while (num <= 95)
{
     sum += num;
     num += 10;
}  //end while
```
5.
```
while (num <= .15)
{
     cout << num << endl;
     num += .01
}  //end while
```

USING THE `for` STATEMENT

The answers for the Using the `for` Statement section are located at the end of the section.

1. Write a pretest loop that adds together the integers from 10 through 100. Use an `int` variable named `num` to keep track of the integers, and use an `int` variable named `sum` to store the sum of the integers. Use the `for` statement.

2. Write a pretest loop that adds together the integers 5, 15, 25, 35, 45, 55, 65, 75, 85, and 95. Use an `int` variable named `num` to keep track of the integers. Store the sum in an `int` variable named `sum`. Use the `for` statement.

3. Write a pretest loop that displays the numbers .05, .06, .07, .08, .09, .10, .11, .12, .13, .14, and .15. Use a `double` variable named `num` to keep track of the numbers. Use the `for` statement.

4. A `char` variable named `letter` contains an uppercase letter. Write a `for` clause that processes the loop instructions as long as the variable's value is either Y or T.

5. Write a `for` clause that will stop the pretest loop when the value in the `inStock` variable is less than or equal to the value in the `reorder` variable.

ANSWERS FOR THE USING THE `for` STATEMENT SECTION

1.
```
for (int num = 10; num <= 100; num += 1)
     sum += num;
//end for
```
2.
```
for (int num = 5; num <= 95; num += 10)
     sum += num;
//end for
```
3.
```
for (double num = .05; num <= .15; num += .01)
     cout << num << endl;
//end for
```
4.
```
for (; letter == 'Y' || letter == 'T';)
```
5.
```
for (; inStock > reorder;)
```