

1. Why should you indent the statements in the body of a loop?

By indenting the statements, you make them stand out from the surrounding code. This helps you to identify the statements that are conditionally executed by a loop

3. Why are the statements in the body of a loop called conditionally executed statements?

Because they are only executed when a condition is true

5. Which loop should you use in situations where you wish the loop to repeat until the test expression is false, and the loop should not execute if the test expression is false to begin with?

The while loop

7. Which loop should you use when you know the number of required iterations?

The for loop

9. Why is it critical that accumulator variables be properly initialized?

Accumulator is used to keep a running total of numbers. In a loop, a value is usually added to the current value of the accumulator. If it is not properly initialized, it will not contain the correct total.

11. What header file do you need to include in a program that performs file operations?

<fstream>

13. What data type do you use when you want to create a file stream object that can write data to a file?

ofstream

15. What is a file's read position? Where is the read position when a file is first opened for reading?

When a file has been opened for input, the file stream object internally maintains a value known as a read position. A file's read position marks the location of the next byte that will be read from the file. When an input file is opened, its read position is initially set to the first byte in the file.

So, the first read operation extracts data starting at the first byte. As data is read from the file, the read position moves forward, toward the end of the file.

17. When the increment or decrement operator is placed before the operand (or to the operand's left), the operator is being used in \_\_\_\_\_ mode.

prefix

19. The statement or block that is repeated is known as the \_\_\_\_\_ of the loop.

body

21. A loop that evaluates its test expression before each repetition is a(n) \_\_\_\_\_ loop.

pretest

23. A loop that does not have a way of stopping is a(n) \_\_\_\_\_ loop.

Infinite

25. A(n) \_\_\_\_\_ is a sum of numbers that accumulates with each iteration of a loop.

accumulator

39. Write a nested loop that displays 10 rows of #'s and 15 #'s in each row.

```
for(int i=0; i<10; i++)
{
    for(int x=0; x<15; x++)
    {
        Cout << "#";
    }
    Cout << endl;
}
```