

## Quiz 2 Answers

1. What must header file must you `#include` to use the `setw()` manipulator?

`<iomanip>`

2. What does the `showpos` manipulator do?

A plus sign (+) will precede every non-negative number printed (including zeros).

3. What is the default value of the `setw()` manipulator?

0. The item printed will have no minimum width.

4. What is the `g++` option for compiling a source code file into an object file, but not linking it into an executable file?

`-c`

5. Which manipulator does not have a persistent effect and must be coded for each value printed?

`setw` (although `endl` could also qualify)

6. In fixed floating point format, what does *precision* represent?

The number of digits that will be printed *after the decimal point* when a floating point number is printed.

7. Write a variable declaration for a pointer to a `char`.

`char* ptr`

8. An array of `char` named `studentName` contains a C string. Write code to copy this C string into another array of `char` named `searchName`.

`strcpy(searchName, studentName);`

9. Write a definition for a function that takes one argument, an array of `char` that contains a C string. The function should return an integer representing the number of numeric digits contained in the C string.

```
int countDigits(char s[])
{
    int i, total = 0;

    for (i = 0; s[i] != '\0'; i++)
    {
        if (isdigit(s[i]))
            total++;
    }

    return total;
}
```

10. Write a definition for a function that takes two arguments, an array of `char` that contains a C string, and a `char` variable. The function should return an integer representing the number of times the value of the second parameter occurs in the C string passed in as the first parameter.

```
int countChar(char s[], char ch)
{
    int i, total = 0;

    for (i = 0; s[i] != '\0'; i++)
    {
        if (s[i] == ch)
            total++;
    }

    return total;
}
```