Blocks, Style & Indentation

In previous example, both the `if` body and the `else` body contain a <mark>single statement</mark>, so braces <mark>are not required</mark>, even though I would recommend adding them. When you want to have a **group of statements** in place of a single statement, place those statements in a <mark>block</mark>, sometimes called a <mark>compound statement</mark>, which is a collection of statements enclosed in curly braces.

The placements of braces and indentation are topics of "religious" fervor. You can read more about the "wars", and the different styles on Wikipedia.

The most common styles are **K&R style**, which places the opening brace on the same line as the header, and **Allman** (or **ANSI** or **BSD**) style, which places the opening brace on its own line.

```
// K&R Formatted
cout << "The number " << n << " is ";
if (nt % 2 == 0) {
    cout << "even." << endl;
} else {
    cout << "odd." << endl;
}
```

The K&R style, shown here, is more compact, but, for me, the Allman style (which is what I normally use), is more readable.

Statements inside of a block are usually **indented**. The compiler ignores the indentation, but the visual effect is helpful since it emphasizes the program structure when reading it. Empirical research has shown that <mark>indenting three or four spaces</mark> at each new level makes the program structure easiest to see; in CS150 I'll use four spaces for each new level.

Indentation is critical to good programming, so you should strive to develop a consistent indentation style in your programs.