Comparison Operators

==	Test for Equality
!=	Test for not equal
>	Test for greater than
>=	Test for greater or equal
>	Test for less than
<=	Test for less or equal

Dan McElroy

Sept 2018

The Six Comparison Operators

The comparison operators are also referred to as the relational operators. They establish a relationship between two pieces of data. Every high-level programming language has the exact same list of comparison operators, but they may be coded differently in different languages.

The Six Comparison Operators

bash	FORTRAN	Visual Basic	C, C++, Java, etc.	
-eq	.EQ.	=	==	Test for Equality
-ne	.NE.	<>	!=	Test for not equal
-gt	.GT.	>	>	Test for greater than
-ge	.GE	>=	>=	Test for greater or equal
-lt	.LT.	<	<	Test for less than
-le	.LE.	<=	<=	Test for less or equal

The biggest things to watch for in the curly-brace languages such as C, C++, Java, and others is that the double-equal == is the test for equality and the <> is the test for not-equal. The single-equal is only used for assignment.

Visual Basic uses the single-equal for both assignment and test for equality.

Using the Comparison Operators

The comparison operators are most often used as part of an if statement or while statement. They can also be used to build an expression that evaluates to true or false when the expression is assigned to a boolean variable.

Pass the DMV test with 70 or greater

```cpp
int score;
score = 75;
if (score >= 70)
    cout << "You passed\n";
else
    cout << "Sorry, try again";
```