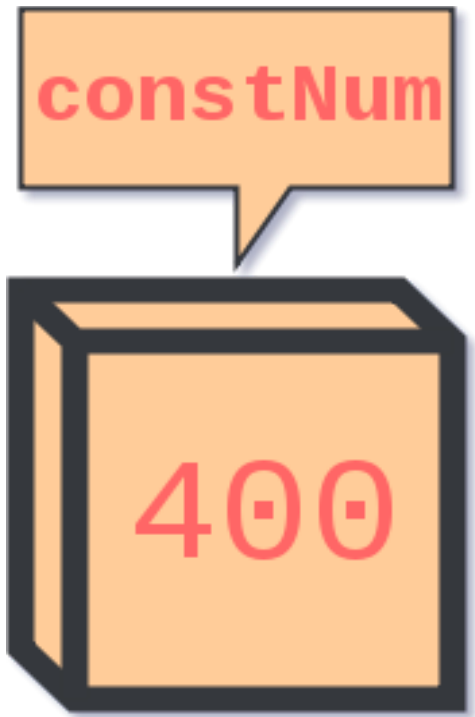


Constant Variables

Constant variables are variables that the value declared is the only value allowed. In other words, this value cannot be changed throughout the program like regular variables discussed on the previous page.

When declaring a variable that you want to be made a constant, the **keyword/qualifier** `const` must be entered before the type of the variable. A **keyword** is a special word that has a specific meaning in a programming language. Example **keywords** are: `int`, `char`, `for`, `if`. A **qualifier** is a keyword that modifies a type (`int`, `long`, `char`, etc). An example of this is `const int constNum = 400`; Now, whenever `constNum` is used, the program will understand the associated value is 400. If you try to alter the value on another line of code, a compile-time error will occur.



Think of a constant variable as a box that is completely sealed shut and can never be opened. You know the content of this box, and can share this knowledge, but the content of the box will never be changed. A common use for this is during declaring a function's formal parameters to pass in a variable that should not be altered.

Examples

```
const string myString = "I cannot be altered";
const double decimal = 9.8521;
const char letter = 'L';
//Now, let us see what happens when I try to alter the decimal
decimal = 10.2112;
error: cannot assign to variable 'decimal' with const-qualified type
'const double'
```