Types of Variable Scope with Example

1. Local Scope

Local scope refers to variables defined in current function. Always, a function will first look up for a variable name in its local scope. Only if it does not find it there, the outer scopes are checked.

Look at this example



2. Global Scope

A variable which is declared outside of all the functions in a program is known as global variable. This means, global variable can be accessed inside or outside of all the functions in a program. Consider the following example



3. Enclosed Scope

A function (method) with in another function is called nested function. A variable which is declared inside a function which contains another function definition with in it, the inner function can also access the variable of the outer function. This scope is called enclosed scope.

When a compiler or interpreter search for a variable in a program, it first search Local, and then search Enclosing scopes. Consider the following example



4. Built-in Scope

5.

The built-in scope has all the names that are pre-loaded into the program scope when we start the compiler or interpreter. Any variable or module which is defined in the library functions of a programming language has Built-in or module scope. They are loaded as soon as the library files are imported to the program

