

Local Variables

Parameter variables, and variables created inside a function, are local variables, **allocated on the stack** in a block of memory called a **stack frame**. Internally, these variables are **pushed onto the top of the stack** at the time of each function call.

The same local variable may be stored at a different address each time the function is called. In fact, when we covered **recursion** earlier in the semester, we saw that there may be **multiple copies** of the **same local variable**, each stored at a different location on the stack. This is what makes recursion possible.

Local static Variables

A local variable that uses the **static** modifier is not stored on the stack, but **in the static storage area**, like a global variable. As far as its storage class goes, it is a global variable, but as far as its scope and linkage goes, it is a local variable.



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