



Tutorial Link <https://codequotient.com/tutorials/Storage Classes in C/59fdec83e63d6b7fd5dec047>

## TUTORIAL

# Storage Classes in C

## Chapter

### 1. Storage Classes in C

Each variable have some properties in our program like name, address, size, data type etc. These are defined at the time of declaration of variables. These are some very common properties of variables. Variables also have some interesting properties those are required sometimes to make the program much efficient and faster. These are defined by the storage classes of variables. When we declare some variable, we will associate a storage class with it. These properties are Default value, Scope, Storage Location and Lifetime of a variable.

- **Default Value:** - This is the value that must be assigned to a particular variable while it is allocated a memory.
- **Scope:** - This is the part of program which can access a particular variable.
- **Storage Locations:** - In CPU, variables will be given space either in memory or CPU registers. Memory is several magnitude slower in accessing in comparison to registers, but CPU have a few registers, whereas size of memory is large.
- **Lifetime:** - This is a life of a variable, which is the point of time, when it gets destroyed from memory.

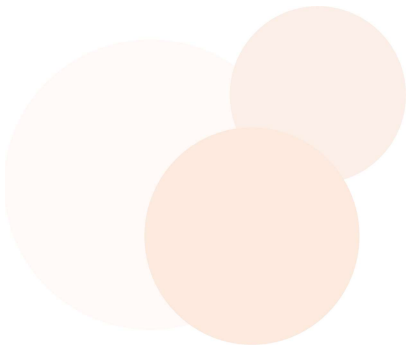
C allows us to declare a variable with any of the 4 different kind of storage classes. These are: -

- `auto` (default storage class for local variables)
- `extern`

- static
- register

These classes are used while declaring variables and they will define the variable life cycle accordingly. General syntax for defining variables with storage classes is as follows: -

```
storage_class_name data_type_name variable_name;
```



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