

Author - Harsh dixit
Mail - harsh02.dixit@gmail.com
Linkedin - <https://www.linkedin.com/in/harsh-dixit10>

Function - is a block of code or sub-program which performs a specific task multiple times when we call it.

ISSUES When functions are not used
1] Lengthy and bulky code
2] Buggy
3] Zero readability
4] Zero reuseability

```
Syntax --->
return_type function_name()
{
    //func body
}
int main()
{
    //func body
}
```

These curly braces defines the scope of the function.

Declaration: the return type, the name of the function, and parameters (if any)

Definition: the body of the function (code to be executed)

Calling: to invoke the function we must have to call it.

NOTE: We must define func before calling it. If we define after calling it then we must declare it above main function otherwise it will give error.

There are 2 types of functions

- 1] Which return some value ---> int , char , string , bool , array
- 2] which returns nothing ---> void

FUNCTION CALL STACK ->

- 1] Tracks function calls
- 2] Local variable -> check upon input variable
- 3] Tracks which func is called by which another func
- 4] Return value

Stack --> works on (Last-in first-out) LIFO principle.
same as plate that are stack on each other in home or marriages.

In functions call stack --->

- 1] The first entry in the function call stack must be for main function.
- 2] Whenever we get a function call an entry should be added for that in function call stack.
- 3] Whenever function body or scope ends that entry should be removed from function call stack.

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