

Static functions in C

Difficulty Level : Easy ● Last Updated : 24 Aug, 2020

Prerequisite : [Static variables in C](#)

In C, functions are global by default. The "*static*" keyword before a function name makes it static. For example, below function *fun()* is static.

```
static int fun(void)
{
    printf("I am a static function ");
}
```

Unlike global functions in C, access to static functions is restricted to the file where they are declared. Therefore, when we want to restrict access to functions, we make them static. Another reason for making functions static can be reuse of the same function name in other files.

For example, if we store following program in one file *file1.c*

```
/* Inside file1.c */
static void fun1(void)
{
    puts("fun1 called");
}
```

And store following program in another file *file2.c*

```
/* Inside file2.c */
int main(void)
{
    fun1();
    getchar();
    return 0;
}
```

error *"undefined reference to `fun1'"*. This is because *fun1()* is declared *static* in *file1.c* and cannot be used in *file2.c*.

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