

What is a Function?

It is block of code which takes input, processes it and produce output.

Functions run only when it is called.

Types of functions

- User-defined
 1. add()
 2. display()
 3. show()
- Pre-defined
 1. strcpy()
 2. strcmp()

etc

User-defined function syntax :-

```
return_type function_name(parameters) {  
    //block of code  
}
```

Recursion

When a function call itself the function is known as recursive function and the mechanism is known as recursion.

Syntax-

```
return_type function_name(parameter) {  
    if(base_condition) {  
        //code  
    } else {  
        Function_name(parameter);  
    }  
}
```

Call by value

In call by value the actual value of variable cannot be changed, if we change the value of function parameter it is only changed for current function.