Recursion

- A function calling itself is called recursion

- There must be a base condition that will terminate the recursion otherwise it will go into infinite loop
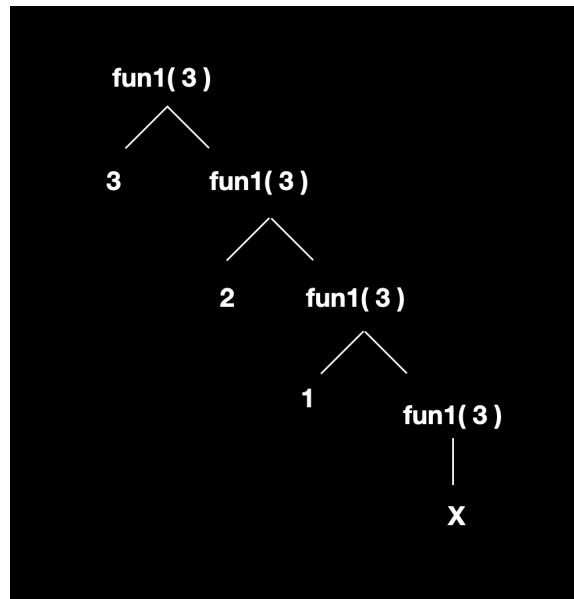
Syntax :

Type fun(param)

{

if(< base condition >)
{

    1……….
    2. fun(param)
    3……….
}

}

An example of Recursive Function :

```c
void fun1(int n)
{
    if(n>0)
    {
        printf("%d" , n );
        fun1(n-1);
    }
}

void main()
{
    int x = 3;
    fun1(x);
}
```

Working Of Recursive Function :

- Once the functions are executed and the end result is obtained then it trace back to the previous functions and terminates it until all the calls are closed and terminated .

- Printing of function can be done on calling time or returning time .