

CPP NOTES – DAY 09

Recursive Functions

Function **calling itself** to solve a small state of the same problem is called as recursive function.

```
main(){  
    recFunc();  
}  
  
Int recFunc(){  
    recFunc();    //recursion  
}
```

Stack Execution Flow of Recursive functions:

1. A function is called, which triggers a series of recursive calls, each passing a smaller instance of the original problem.
2. The function calls continue until a base case is reached, which provides a stopping condition.
3. At the base case, the recursion starts to return values back up the call stack.
4. As each function returns, it computes its result by combining the returned value with its own parameters.
5. Finally, the top-most function receives the computed result, and the call stack is empty after the last return.

I/O Operations

Input/Output (I/O) operations are commonly performed using the Standard Library, specifically through the `<iostream>` header. This header provides functionality for reading from and writing to the console, files, and other streams.

Eg: File i/o, Binary i/o, Console i/o etc...

FYI

1. *`<cstdio>`: is a header file in C++ (derived from C) that provides functions for input and output (I/O) operations.*