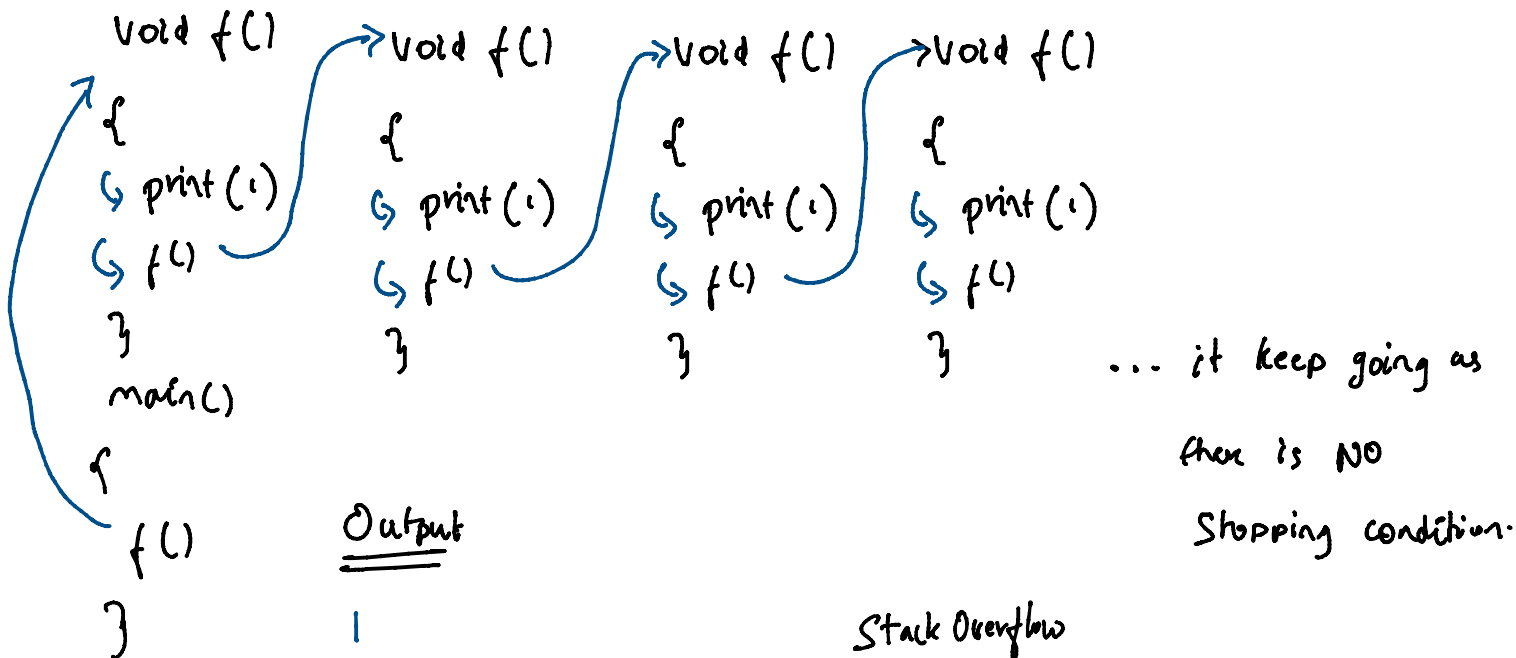


1. Introduction to Recursion

Recursion : * When a function calls itself
* Until a specific condition is met.

base case



Output

|

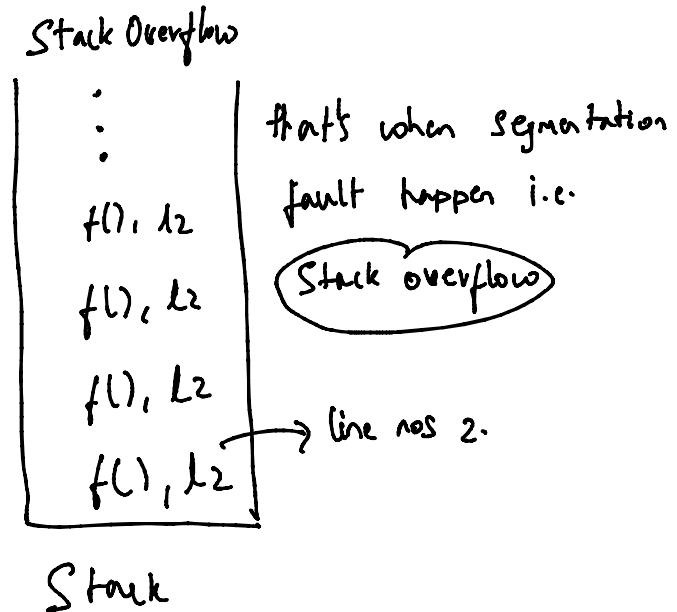
|

|

|

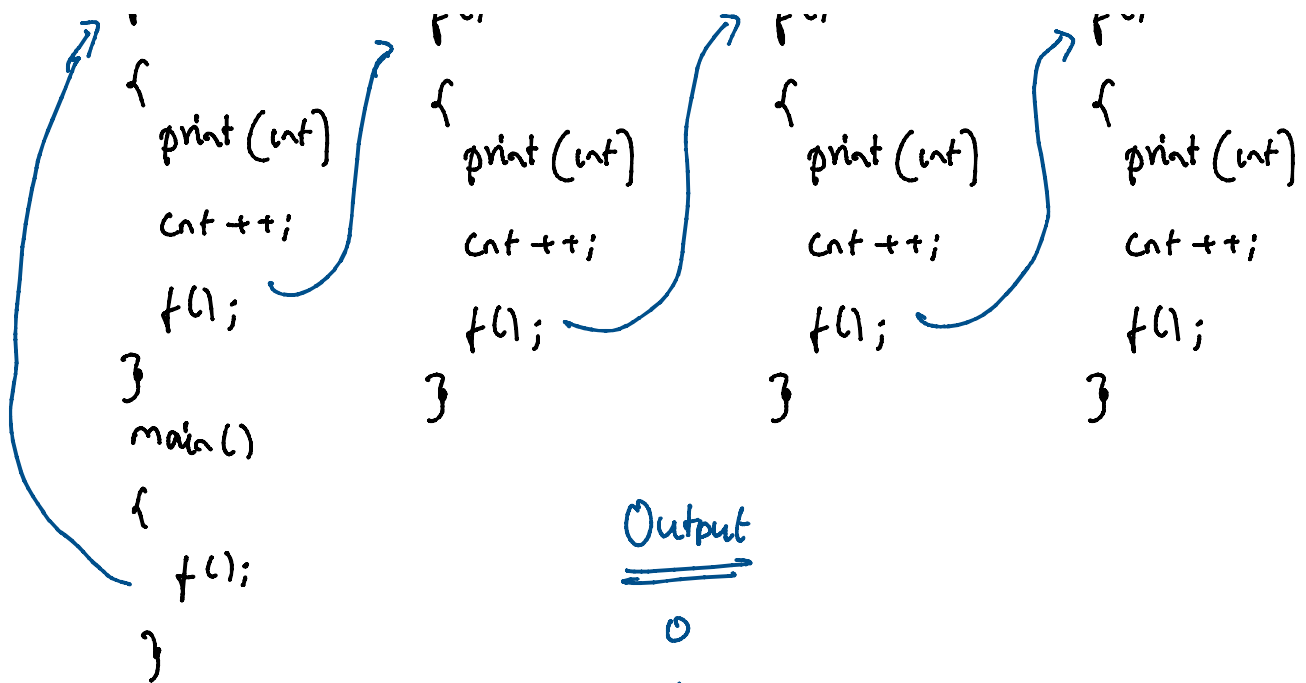
...

(Stack overflow)



cnt = 6 x 2



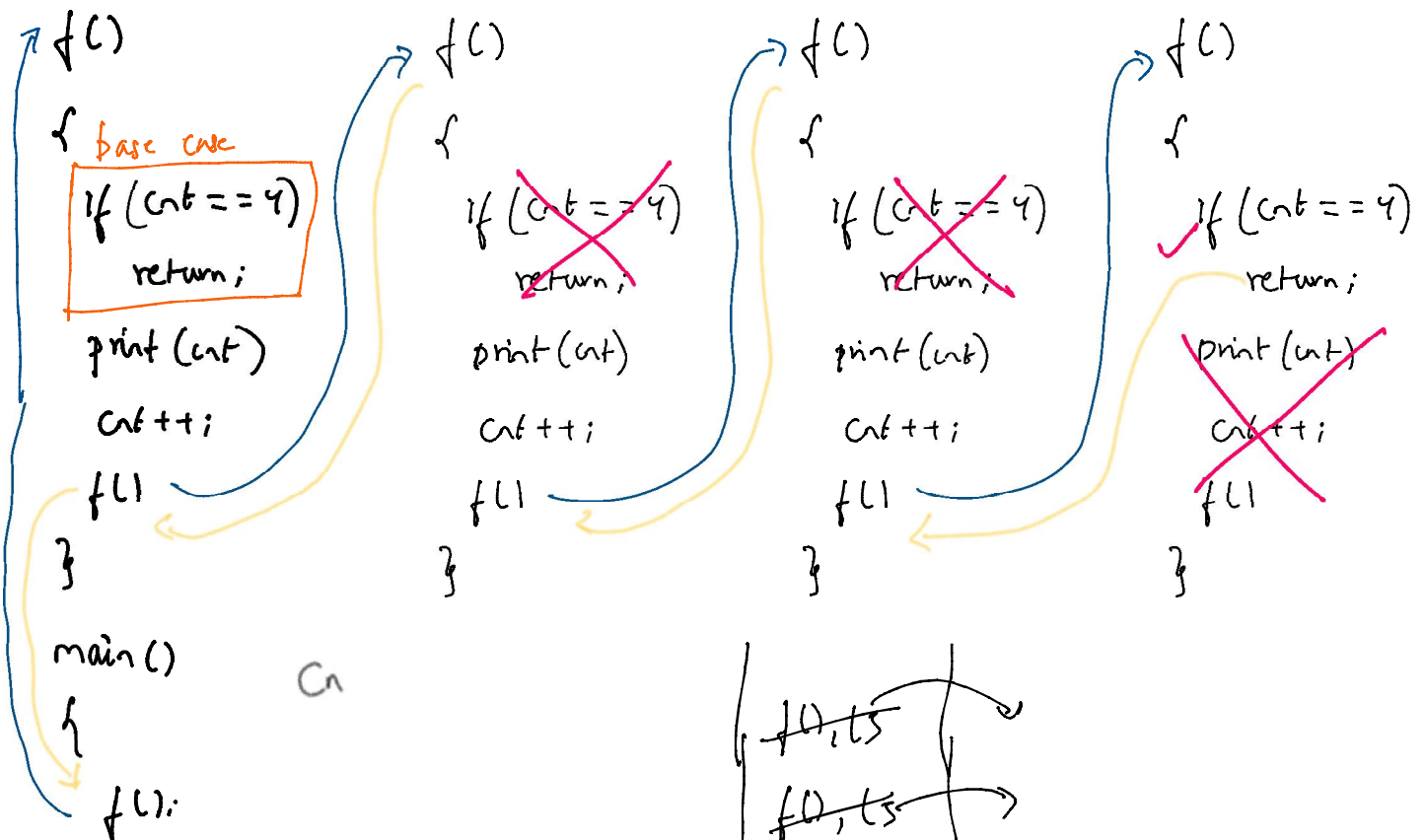


Output

0
1
2
⋮

Q: Program to print till '3'.

cnt = 0, 1, 2, 3, 4



```

    f(1);
}

```

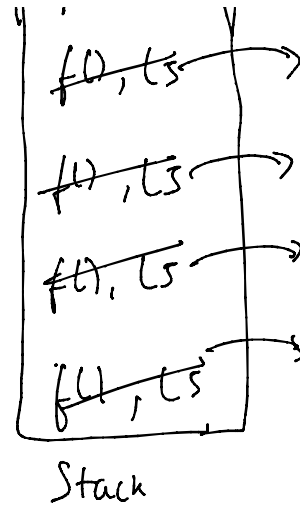
Output

0

1

2

3



```

#include <bits/stdc++.h>
using namespace std;

int cnt = 0;

void print()
{
    if (cnt == 4)
        return;
    cout << cnt << endl;
    cnt++;
    print();
}

int main()
{
    print();
    return 0;
}

```

Recursion Tree:

