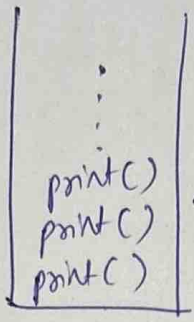
REA: RECURSION INTRODUCTION

Recursion :- when a function calls itself until a specified condition is met.

```
void print() {
    cout << 1 << endl;
    print();
}

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



Overflow condition

↓

type of segmentation fault

```
count = 0
f() {
  print(count);
  count++;
  f();
}
main() {
  f();
}
```

output: 0 1 2 3 . . .

BASE CONDITION:- used to stop this

```
f()
{ if (count == 4) {
    return;
  }
  else {
    print(count);
    count++;
    f();
  }
}
main() {
  f();
}
```

0 1 2 3

Recursion Tree