

# Shell Programming

A Necessity for all Programmers

## Recursive Functions

---

Nagesh Karmali | Firuza Karmali



Department of Computer Science and Engineering  
IIT Bombay

# You will learn to ...

- Write recursive functions

- Function calls itself
- Value of parameters differ
- Divide and Conquer
- Condition to stop the recursion process

# Recursion: Example Program

```
#!/bin/bash
counter()
{
    echo "Entry call $1"
    if [ $1 -le 2 ]
    then
        counter $(( $1 + 1 ))
    fi
    echo "Exit call $1"
}
counter 1
```

```
counter()
{
    echo "Entry call $1"
    if [ $1 -le 2 ]
    then
        counter $(( $1 + 1 ))
    fi
    echo "Exit call $1"
}
```

```
counter()
{
    echo "Entry call $1"
    if [ $1 -le 2 ]
    then
        counter $(( $1 + 1 ))
    fi
    echo "Exit call $1"
}
```

```
counter()
{
    echo "Entry call $1"
    if [ $1 -le 2 ]
    then
        counter $(( $1 + 1 ))
    fi
    echo "Exit call $1"
}
```

# Now, you can ...

- Write recursive functions

# Thank you

