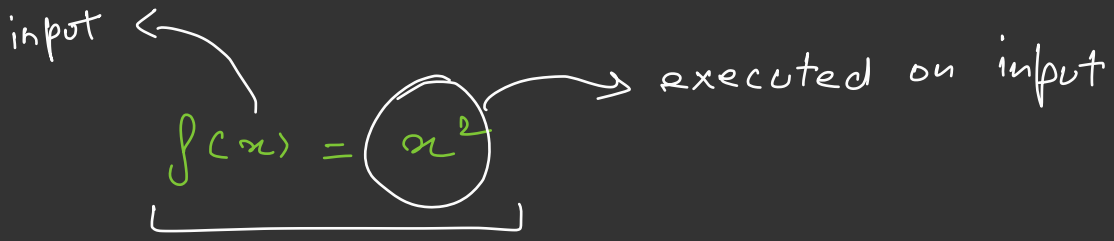
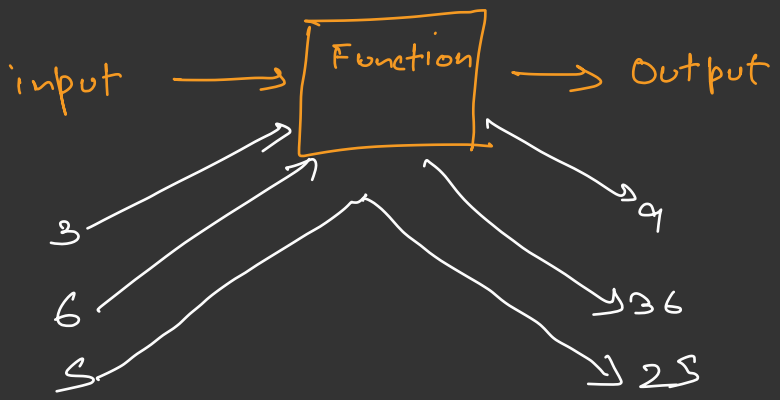
Functions



function



$$^{n}C_{r} = \frac{n!}{r!(n-r)!}$$

$^{5}C_{3}$

```
int nfact = 1;
for(int i = 1; i <= n; i++) {
    nfact *= i;
}

int rfact = 1;
```

```
for(int i=1; i<=r; i++)
    rfact *= i;
}

int nmrfact = 1;
for(int i=1; i<=n-r; i++) {
    nmrfact *= i;
}

int ncr = nfact/(nmrfact * rfact)

syso(ncr);
```

DRY ⇒ Don't Repeat Yourself

public static returnType Name(parameters) {

Body [

}

returnType → int, long, byte, double, ... etc

Void

```
public static int factorial(int n) {
    int nfact = 1;
    for(int i = 1; i <= n; i++) {
        nfact *= i;
    }
    return nfact;
}
```

parameter

```
factorial(2);
```

argument

function call

```
s void fun(int n){
  int a = 40;
}

ps v m() {
  int a = 10;
  int b = 20;
  boolean c = false;
  fun(2);
  fun(3);
  syso(a);
}
```

RAM