Factorial

n	n!
0	1
1	1
2	$1 \times 2 = 2$
3	$1 \times 2 \times 3 = 6$
4	$1 \times 2 \times 3 \times 4 = 24$
5	$1 \times 2 \times 3 \times 4 \times 5 = 120$

input : n
output : n! (factorial)

```
int factorial = 1
else {
    for (int i=2; i<=n ;i++) {
        factorial *= i;
    }
}
return factorial;
```

recursive

```
factorial (n)
    if (n == 0 || n == 1)
        return 1;

    else return n * factorial (n-1);
```