

## Factorial- Daniel Voznyy

Trace 1 = 5!

f() is being used as the method name instead of factorial() for simplicity

```
f(5);  
= 5 * f(4);  
= 5 * (4 * f(3));  
= 5 * (4 * (3 * f(2)));  
= 5 * (4 * (3 * (2 * f(1))));  
= 5 * (4 * (3 * (2 * (1 * f(0)))));  
= 5 * 4 * 3 * 2 * 1 * 1  
= 120
```

returns 120

Trace 1 = 7!

```
f(5);  
= 7 * f(6);  
= 7 * (6 * f(5));  
= 7 * (6 * (5 * f(4)));  
= 7 * (6 * (5 * (4 * f(3))));  
= 7 * (6 * (5 * (4 * (3 * f(2)))));  
= 7 * (6 * (5 * (4 * (3 * (2 * f(1))))));  
= 7 * (6 * (5 * (4 * (3 * (2 * (1 * f(0)))))));  
= 7 * 6 * 5 * 4 * 3 * 2 * 1 * 1  
= 3600
```

returns 3600