

```

int fact(int num) // 5
{
    if(num == 0)
        return 1;
    return num * fact(num-1);
}

```

$$1 * 1 = 1$$

$$2 * 1 = 2$$

$$3 * 2 = 6$$

$$4 * 6 = 24$$

$$5 * 24 = 120$$

