```c
int main()
{
    int num = 5;
    int result = my_fact(num);// result = 120
    printf("result = %d",result);
    return 0;
}
int my_fact(int num)// 5
{
    if(num == 0)// terminating condition
        return 1;

    return num * my_fact(num-1);
}
```

120

5

1 * 1 = 1

2 * 1 = 2

3 * 2 = 6

4 * 6 = 24

5 * 24 = 120

fact()   num   0

1

fact()   num   1

1

fact()   num   2

2

fact()   num   3

6

fact()   num   4

24

fact()   num   5

120   200

main()   num   result

5   120

100