

```
#include <stdio.h>
//test2
unsigned long factorial(unsigned short num);

int main(void)
{
    unsigned short num=1;
    while(num<=21)
    {
        printf("%2u! = %lu\n",num,num*factorial(num-1));
        num++;
    }
    return 0;
}

unsigned long factorial(unsigned short num)
/*Finds the factorial of an unsigned short num
Returns factorial result as unsigned long*/
{
    if(num<=1)
        return 1;
    else
        return num*factorial(num-1);
}
```