

202018021

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Programming I Special Task 1

2021/07/07

Task 1

1. Objective

To make a program that calculates 1 to 10 factorial.

2. Strategy of solving

- Create a function that calculates factorial of any given number
- Run the function in a for loop from 1 to 10

3. Program code

```
#include <stdio.h>

int factorial(int a);

int main() {
    for(int i = 1; i <= 10; ++i) {
        printf("%d\n", factorial(i));
    }
    return 0;
}

int factorial(int a) {
    int out = 1;
    for(int i = a; i >= 1; --i) {
        out*=i;
    }
    return out;
}
```

4. Results and discussions

Console output:

```
1
2
6
24
120
720
5040
40320
362880
3628800
```

The program outputs as expected.