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 [ninjassolutions.s3.amazonaws.com/0000000000000155.h](https://ninjassolutions.s3.amazonaws.com/0000000000000155.h)

```
#include <iostream>
using namespace std;

int factorial(int n) {
    if (n == 0) {
        return 1;
    }
    int smallOutput = factorial(n - 1);
    int output = n * smallOutput;
    return output;
}

int main() {
    cout << factorial(4) << endl;
}
```