

TASK 1

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

int factorial(int n) {
    if (n <= 1)
        return 1;
    return n * factorial(n - 1);
}

int main() {
    int n;
    cin >> n;
    cout << factorial(n) << endl;
    return 0;
}
```

TASK 2

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

int fibonacci(int n) {
    if (n <= 1)
        return n;
    return fibonacci(n - 1) + fibonacci(n - 2);
}

int main() {
    int n;
    cin >> n;
    cout << fibonacci(n) << endl;
    return 0;
}
```

TASK 3

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

string reverseString(string str) {
    if (str.empty())
        return "";
    return reverseString(str.substr(1)) + str[0];
}

int main() {
    string input;
```

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    cin >> input;
    cout << reverseString(input) << endl;
    return 0;
}

```

TASK 4

```

#include <iostream>
#include <vector>
#include <algorithm>
using namespace std;

int main() {
    vector<int> arr;
    int x;

    cout << "Enter array elements (end with non-integer): ";
    while (cin >> x) {
        arr.push_back(x);
    }

    cin.clear();
    cin.ignore();

    int target;
    cout << "Find frequency of: ";
    cin >> target;

    int countX = count(arr.begin(), arr.end(), target);
    int minVal = *min_element(arr.begin(), arr.end());
    int maxVal = *max_element(arr.begin(), arr.end());

    cout << "Count of " << target << ": " << countX << endl;
    cout << "Min: " << minVal << endl;
    cout << "Max: " << maxVal << endl;

    return 0;
}

```

TASK 5

```

#include <iostream>
using namespace std;

int power(int a, int b) {
    if (b == 0)

```

```
        return 1;
    return a * power(a, b - 1);
}

int main() {
    int a, b;
    cin >> a >> b;
    cout << power(a, b) << endl;
    return 0;
}
```