



# NUST

NATIONAL UNIVERSITY  
OF SCIENCES & TECHNOLOGY

## **Home Task # 6**

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# TASK 1

```
#include<iostream>
using namespace std;
int main() {
    int sum = 0;
    for (int i=1;i <= 50; ++i) {
        bool flag = true;
        if (i < 2) {
            flag = false;
        }
        else {
            for (int j = 2; j <= i / 2; ++j) {
                if (i % j == 0) {
                    flag = false;
                    break;
                }
            }
        }
        if (flag != true) {
            continue; // Skip non-prime numbers
        }
        sum = sum + i;
    }
    cout << "Sum: " << sum << endl;
    return 0;
}
```

main.cpp

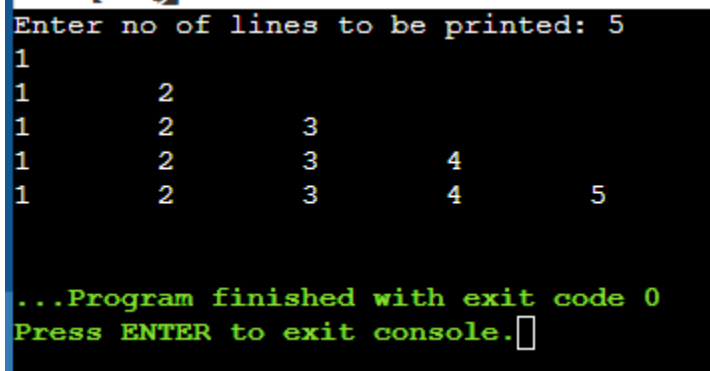
```
1  #include<iostream>
2  using namespace std;
3  int main() {
4      int sum = 0;
5      for (int i=1;i <= 50; ++i) {
6          bool flag = true;
7          if (i < 2) {
8              flag = false;
9          }
10         else {
11             for (int j = 2; j <= i / 2; ++j) {
12                 if (i % j == 0) {
13                     flag = false;
14                     break;
15                 }
16             }
17         }
18         if (flag != true) {
19             continue; // Skip non-prime numbers
20         }
21         sum = sum + i;
22     }
23     cout << "Sum: " << sum << endl;
24     return 0;
25 }
26
```

Sum: 328

...Program finished with exit code 0  
Press ENTER to exit console.

## TASK 2

```
#include<iostream>
using namespace std;
int main() {
    int num;
    cout << "Enter no of lines to be printed: ";
    cin >> num;
    for (int i = 1; i<=num;i++){
        for (int j = 1; j <= i; j++){
            cout << j << "\t";
        }
        cout << endl;
    }
    return 0;
}
```

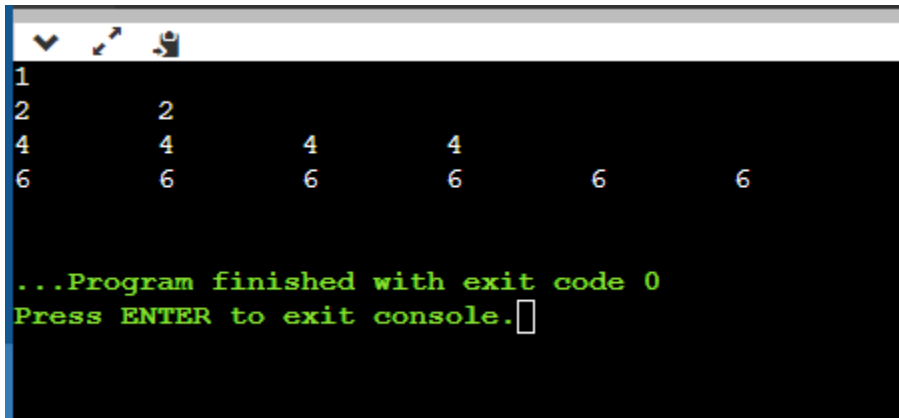


```
Enter no of lines to be printed: 5
1
1      2
1      2      3
1      2      3      4
1      2      3      4      5

...Program finished with exit code 0
Press ENTER to exit console.█
```

## TASK 3

```
#include<iostream>
using namespace std;
int main() {
    cout << 1 << endl;
    for (int i = 2; i<=6; i += 2){
        for (int j = 1; j <= i; j++){
            cout << i << "\t";
        }
        cout << endl;
    }
    return 0;
}
```



The screenshot shows a console window with a dark background. At the top, there are three small icons: a checkmark, a magnifying glass, and a person. Below the icons, the output of the program is displayed in white text. It shows a sequence of numbers: 1, 2, 4, 6 on the first line; 2, 4, 6 on the second line; 4, 6 on the third line; and 6 on the fourth line. The numbers are separated by tabs, creating a triangular pattern. Below the numbers, the text "...Program finished with exit code 0" is shown in green. At the bottom, the text "Press ENTER to exit console." is shown in green, followed by a small white square icon.

```
1
2      2
4      4      4      4      6      6
6      6      6      6      6      6

...Program finished with exit code 0
Press ENTER to exit console. □
```

