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Home Task:

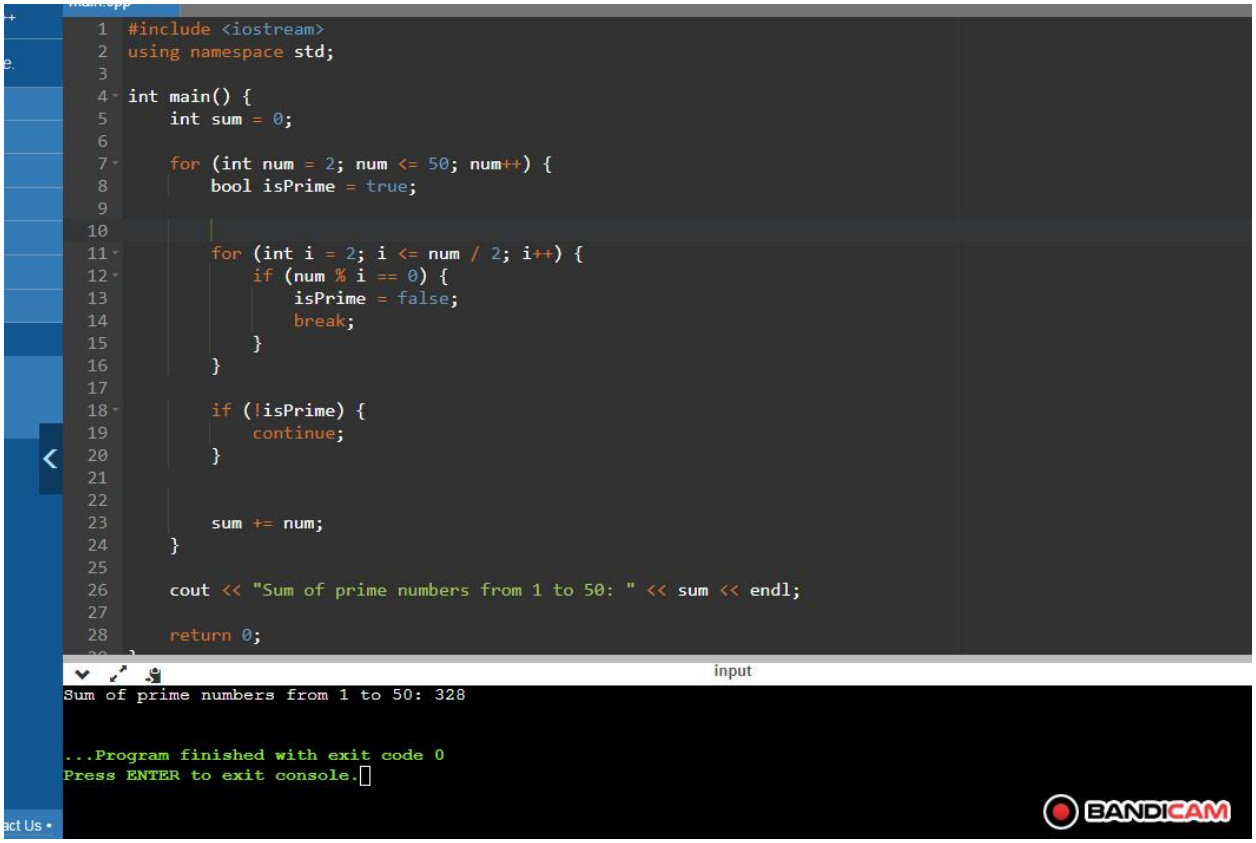
Task 1: Write a program using break or continue statement that only adds prime numbers from 1 to 50 and display the sum on screen.

INPUT:

```
#include <iostream>

using namespace std;


int main() {

   int sum = 0;


   for (int num = 2; num <= 50; num++) {

      bool isPrime = true;


      for (int i = 2; i <= num / 2; i++) {

         if (num % i == 0) {
```

```
            isPrime = false;
            break;          }
        }

        if (!isPrime) {
            continue; // Skip non-prime numbers
        }

        sum += num;
    }

    cout << "Sum of prime numbers from 1 to 50: " << sum << endl;

    return 0;
}
```

Output:



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

int main() {
    int sum = 0;

    for (int num = 2; num <= 50; num++) {
        bool isPrime = true;

        for (int i = 2; i <= num / 2; i++) {
            if (num % i == 0) {
                isPrime = false;
                break;
            }
        }

        if (!isPrime) {
            continue;
        }


        sum += num;
    }

    cout << "Sum of prime numbers from 1 to 50: " << sum << endl;

    return 0;
```

```
input
Sum of prime numbers from 1 to 50: 328


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

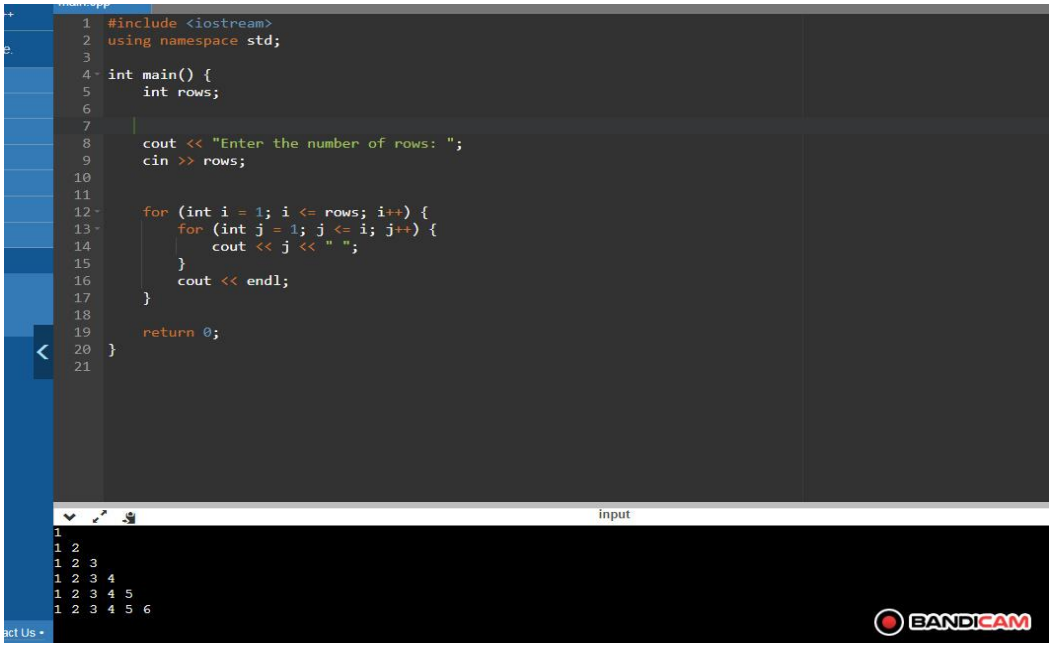
Task 2: Write a program in C++ to create the following pattern.

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

Inputs:

```
#include <iostream>

using namespace std;


int main() {

    int rows;



    cout << "Enter the number of rows: ";

    cin >> rows;



    for (int i = 1; i <= rows; i++) {

        for (int j = 1; j <= i; j++) {

            cout << j << " ";

        }

        cout << endl;

    }


    return 0;

}
```

Output:



Task 3: Write a C++ program to print:

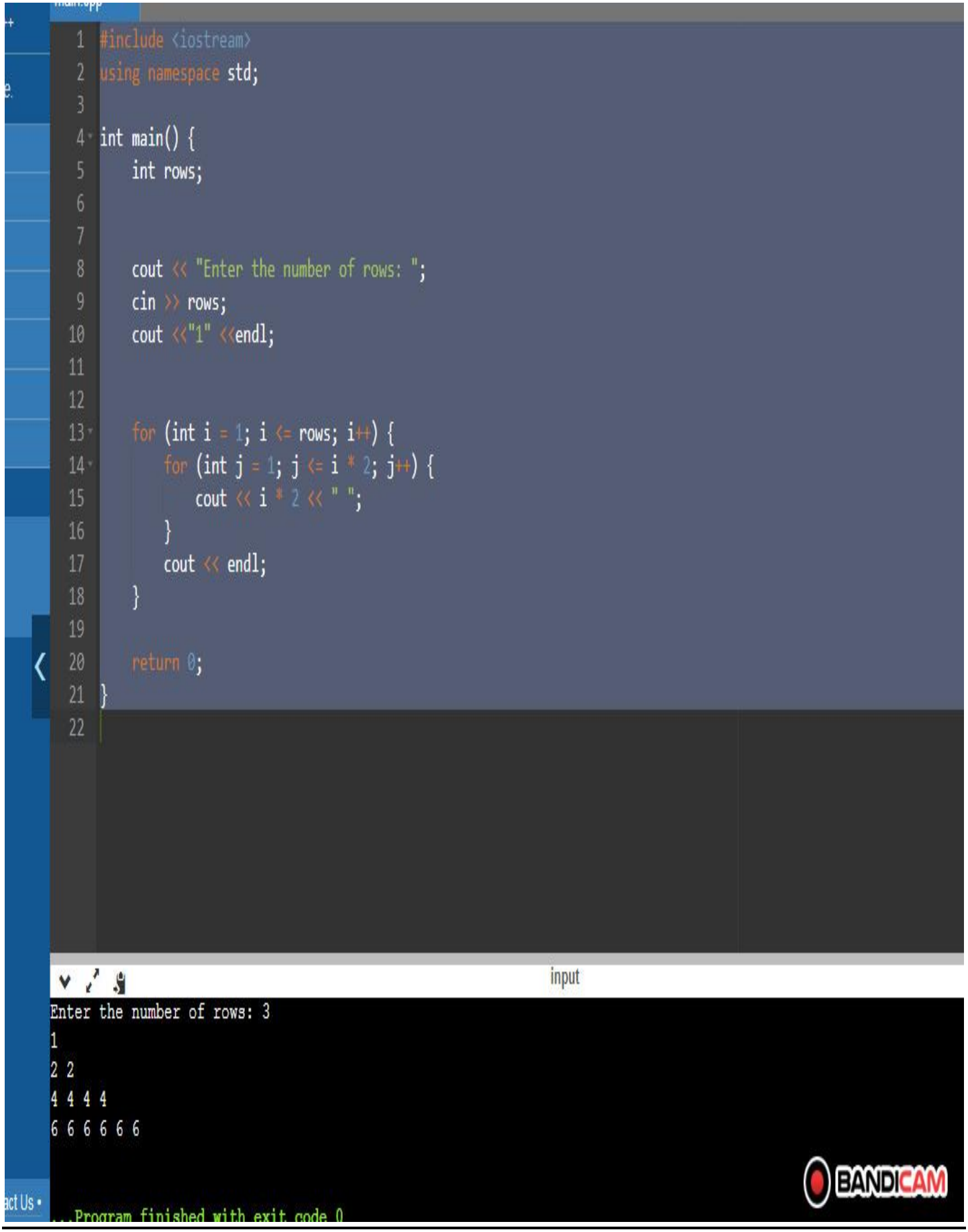
```
1
2 2
4 4 4 4
6 6 6 6 6 6
```

Input:

```
#include <iostream>

using namespace std;


int main() {

    int rows;
```

```
    cout << "Enter the number of rows: ";
    cin >> rows;
    cout <<"1" <<endl;



    for (int i = 1; i <= rows; i++) {
        for (int j = 1; j <= i * 2; j++) {
            cout << i * 2 << " ";
        }
        cout << endl;
    }

    return 0;
}
```

Output:



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

int main() {
    int rows;


    cout << "Enter the number of rows: ";
    cin >> rows;
    cout <<"1" <<endl;


    for (int i = 1; i <= rows; i++) {
        for (int j = 1; j <= i * 2; j++) {
            cout << i * 2 << " ";
        }
        cout << endl;
    }

    return 0;
}
```

```
input
Enter the number of rows: 3
1
2 2
4 4 4 4
6 6 6 6 6 6


...Program finished with exit code 0
```