2017 – 2 – a – part – 1

```cpp
 1    #include <iostream>
 2    using namespace std;
 3
 4    bool is_prime(int n) {
 5        if (n == 1) {
 6            return false;
 7        }
 8
 9        // This will loop from 2 to int(sqrt(x))
10        for (int i = 2; i * i <= n; i++) {
11            if (n % i == 0) {
12                return false;
13            }
14        }
15        // If we did not find any factor in the above loop,
16        // then n is a prime number
17        return true;
18    }
19
```

2017 – 2 – a – part – 2

```cpp
Source.cpp
2017_2_a                          (Global Scope)                          is_prime(
 13             }
 14         }
 15         // If we did not find any factor in the above loop,
 16         // then n is a prime number
 17         return true;
 18    }
 19
 20    int main() {
 21        int n;
 22        cout << "Type a Num: ";
 23        cin >> n;
 24        if (is_prime(n)) {
 25            cout << n <<"is Prime." << endl;
 26        }
 27        else {
 28            cout << n << " is not Prime." << endl;
 29        }
 30        return 0;
 31    }
```

2017 – 2 – c

2017_2_c   (Global Scope)   ⬡ main()
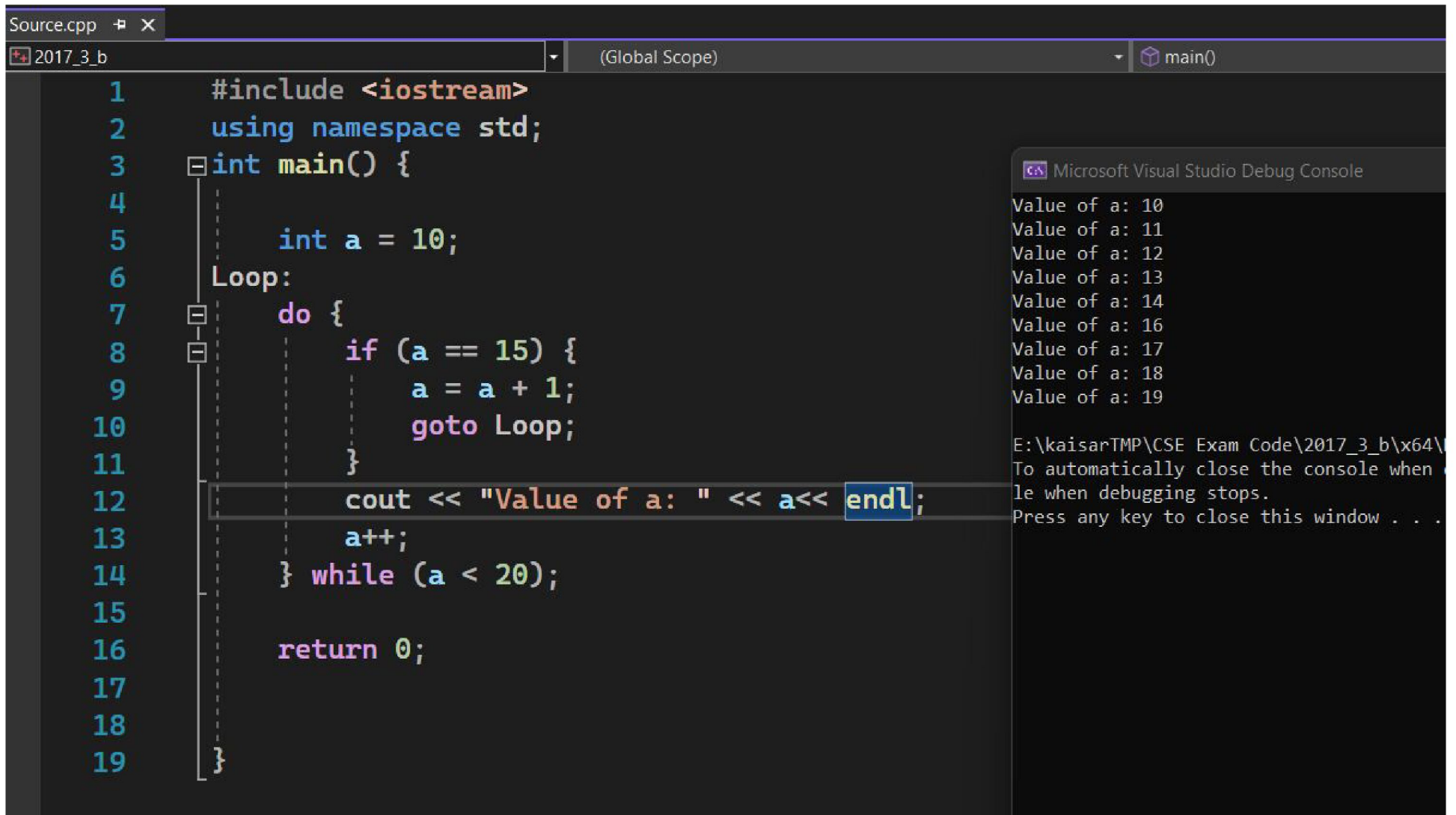
```cpp
1    #include <iostream>
2    using namespace std;
3    int main() {
4
5        int a = 10, b = 20;
6        a += b++;
7        cout << ++a << " " << b++ << endl;
8        return 0;
9    }
```

Microsoft Visual Studio Debug Console

```
31 21

E:\kaisarTMP\CSE Exam Code\2017_2_c\x64\Debug\2017_2_c.exe (process
To automatically close the console when debugging stops, enable Tools
le when debugging stops.
Press any key to close this window . . .
```

2017 - 3 - b

```cpp
#include <iostream>
using namespace std;
int main() {

    int a = 10;
Loop:
    do {
        if (a == 15) {
            a = a + 1;
            goto Loop;
        }
        cout << "Value of a: " << a<< endl;
        a++;
    } while (a < 20);

    return 0;

}
```
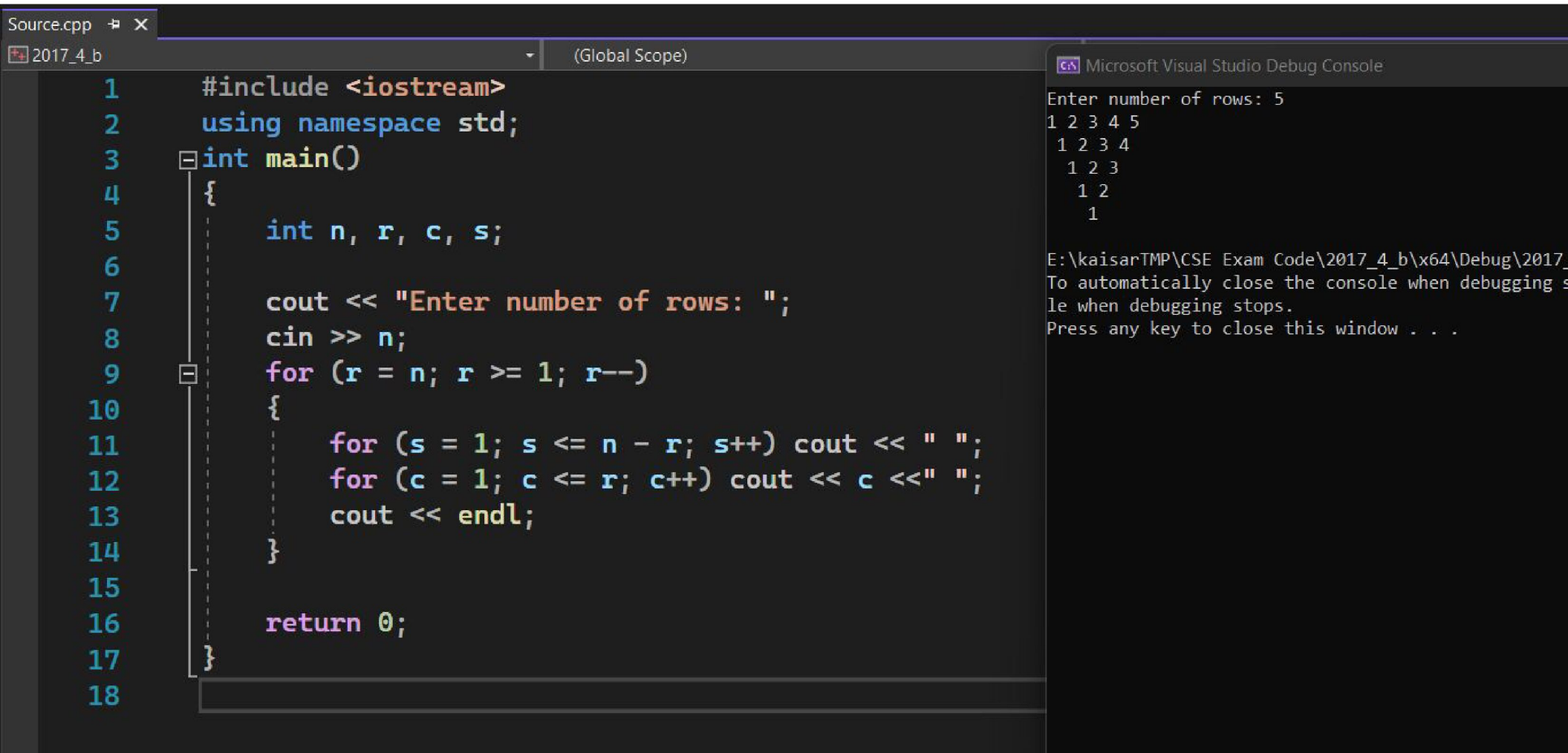
```
Microsoft Visual Studio Debug Console

Value of a: 10
Value of a: 11
Value of a: 12
Value of a: 13
Value of a: 14
Value of a: 16
Value of a: 17
Value of a: 18
Value of a: 19

E:\kaisarTMP\CSE Exam Code\2017_3_b\x64\
To automatically close the console when
le when debugging stops.
Press any key to close this window . . .
```

2017 – 4 – b

```cpp
#include <iostream>
using namespace std;
int main()
{
    int n, r, c, s;

    cout << "Enter number of rows: ";
    cin >> n;
    for (r = n; r >= 1; r--)
    {
        for (s = 1; s <= n - r; s++) cout << " ";
        for (c = 1; c <= r; c++) cout << c <<" ";
        cout << endl;
    }

    return 0;
}
```

2017 – 5 – b – OLD ERROR

```cpp
#include <iostream>

using namespace std;
struct  student{
    int id;
    char name[20];
    float percentage;
};

int main() {

    student std;
    std.id = 1;
    strcpy_s(std.name, "Puja");
    std.percentage = 86.5;
    cout << "ID: " << std.id << endl;
    cout << "Name: " << std.name << endl;
    cout << "Percentage: " << std.percentage << endl;

    return 0;

}
```

2017 – 5 – b – FIXED

```cpp
#include <iostream>

using namespace std;
struct  student{
    int id;
    char name[20];
    float percentage;
};

int main() {

    student std;
    id = 1;
    strcpy(std.name, "Puja");
    percentage = 86.5;
    cout << "ID: " << std.id << endl;
    cout << "Name: " << std.name << endl;
    cout << "Percentage: " << std.percentage << endl;

    return 0;

}
```
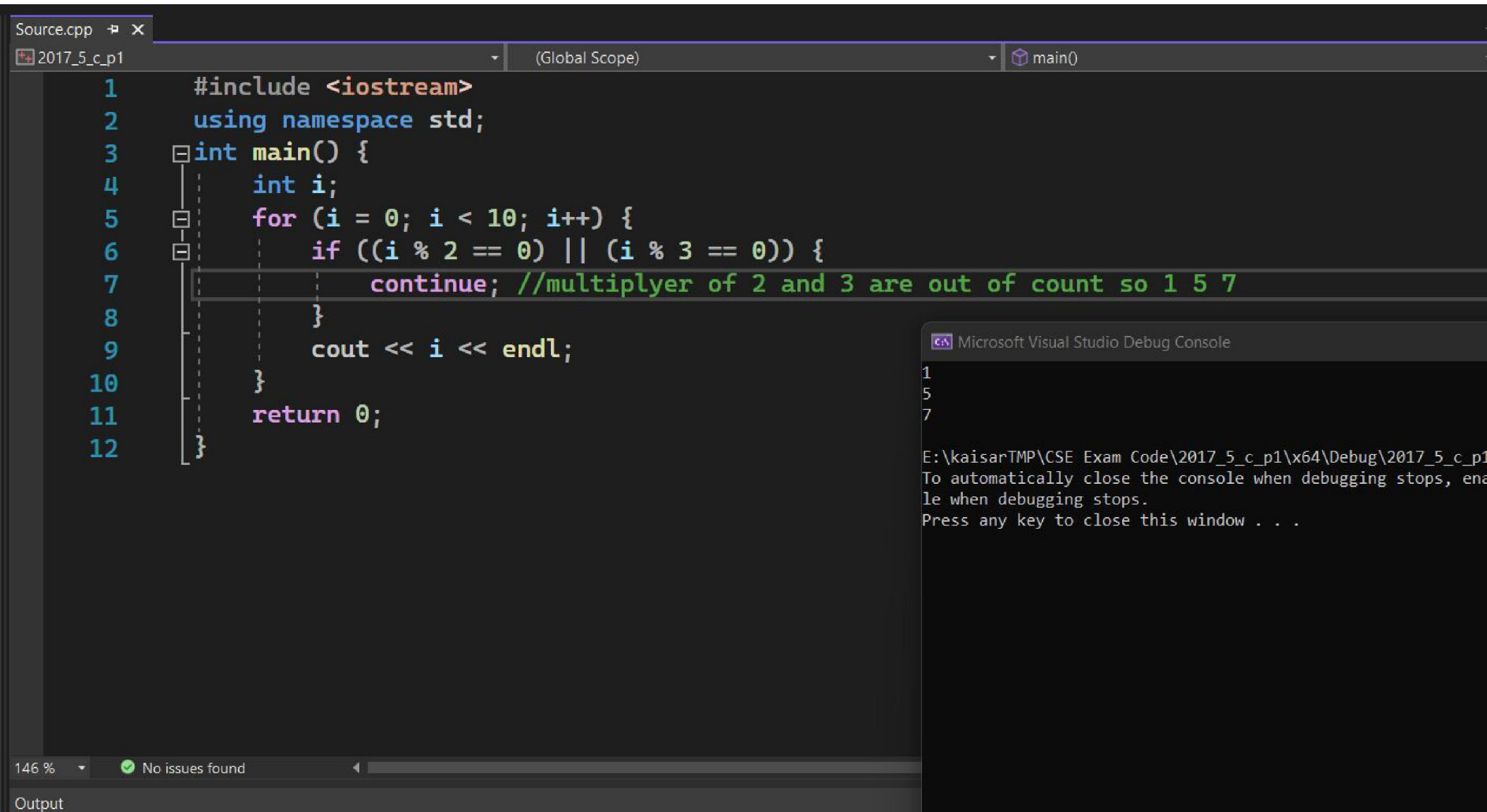
2017 – 5 – c – 1

```cpp
1      #include <iostream>
2      using namespace std;
3     int main() {
4          int i;
5          for (i = 0; i < 10; i++) {
6              if ((i % 2 == 0) || (i % 3 == 0)) {
7                  continue; //multiplyer of 2 and 3 are out of count so 1 5 7
8              }
9              cout << i << endl;
10         }
11         return 0;
12    }
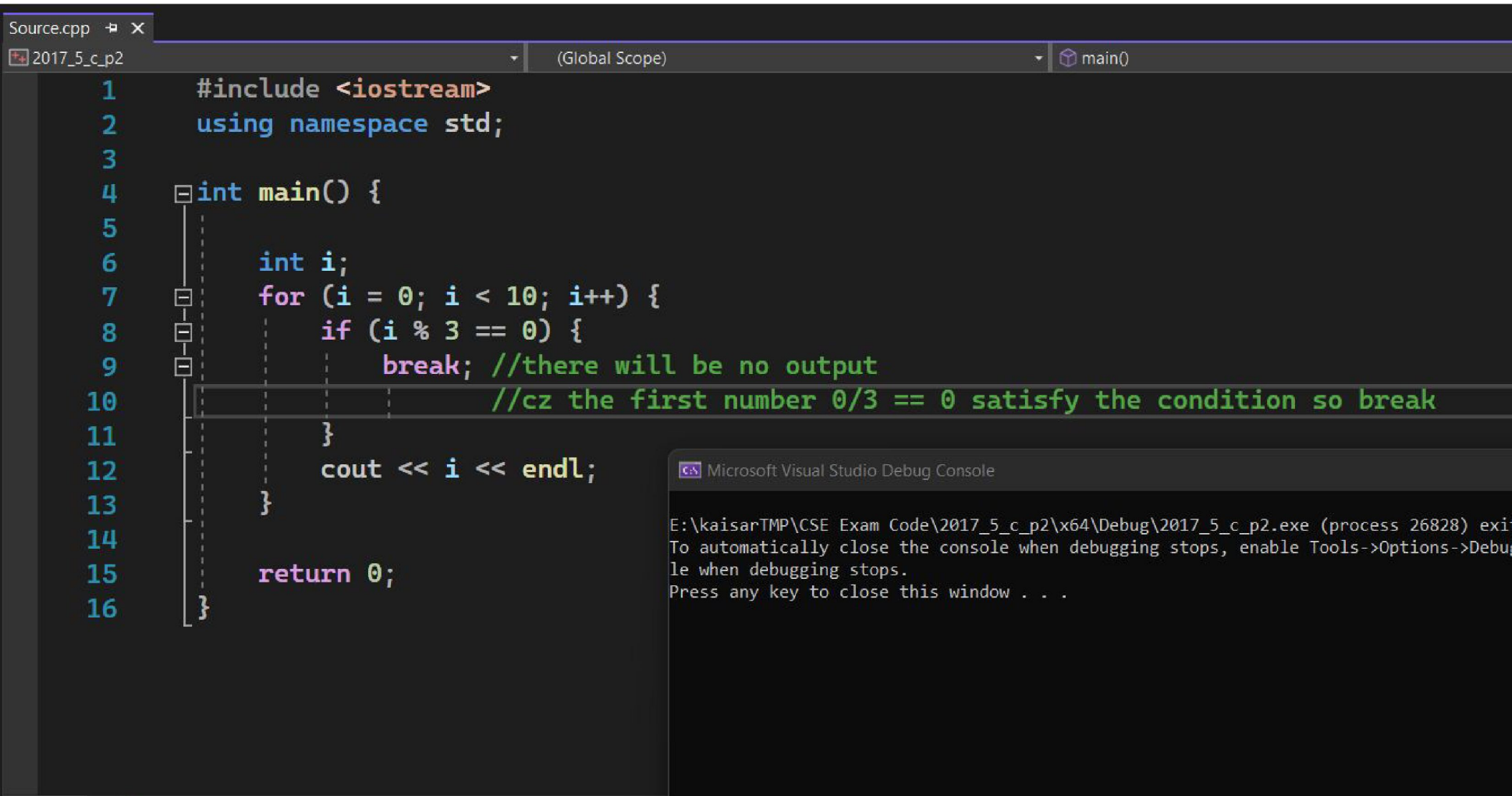```

Microsoft Visual Studio Debug Console

```
1
5
7

E:\kaisarTMP\CSE Exam Code\2017_5_c_p1\x64\Debug\2017_5_c_p1
To automatically close the console when debugging stops, ena
le when debugging stops.
Press any key to close this window . . .
```

146 %   ✓ No issues found

Output

Source.cpp

2017_5_c_p2   (Global Scope)   main()

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

int main() {

    int i;
    for (i = 0; i < 10; i++) {
        if (i % 3 == 0) {
            break; //there will be no output
                         //cz the first number 0/3 == 0 satisfy the condition so break
        }
        cout << i << endl;
    }

    return 0;
}
```

Microsoft Visual Studio Debug Console

E:\kaisarTMP\CSE Exam Code\2017_5_c_p2\x64\Debug\2017_5_c_p2.exe (process 26828) exit
To automatically close the console when debugging stops, enable Tools->Options->Debug
le when debugging stops.
Press any key to close this window . . .

2017 – 6 – a – part – 1
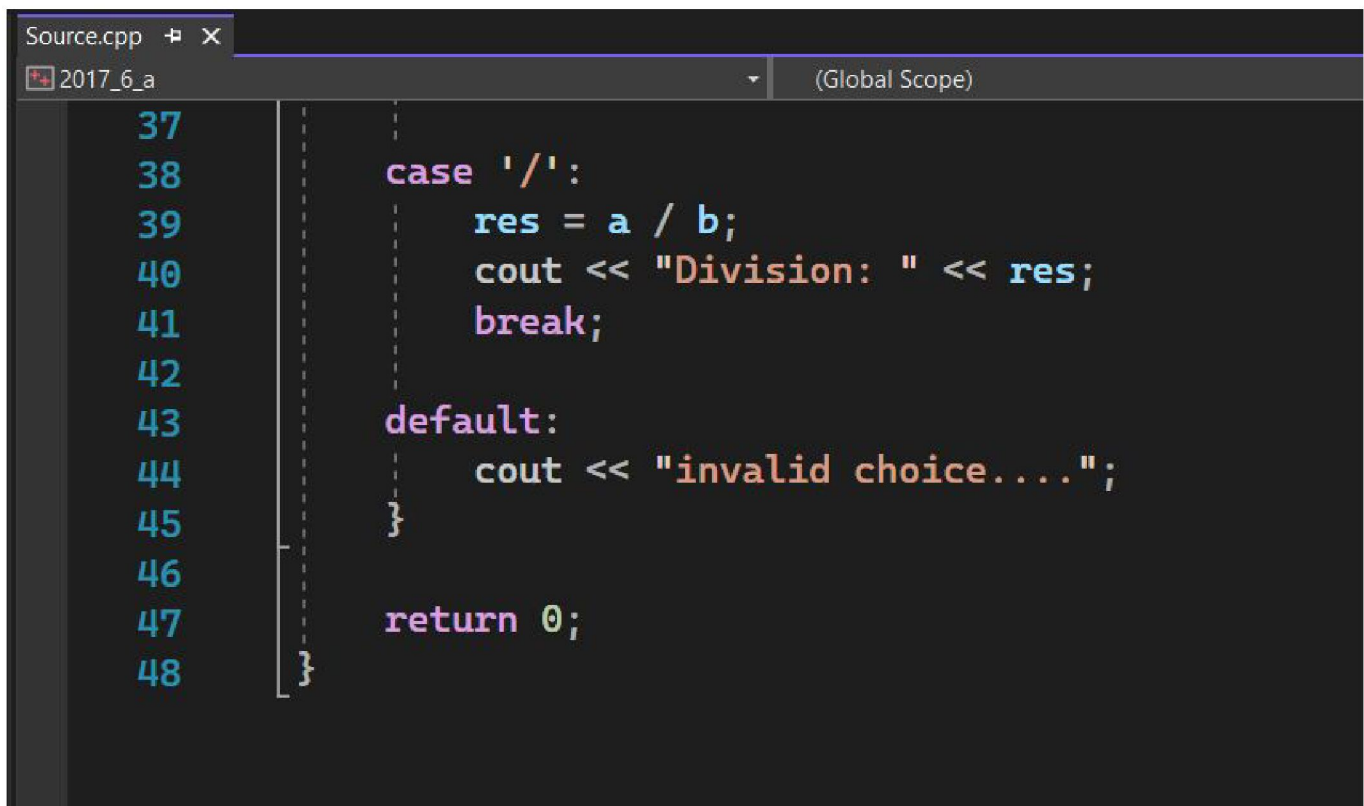
```cpp
1       #include<iostream>
2       using namespace std;
3
4
5     □int main()
6       {
7           char select;
8           double a, b, res;
9           cout << "'+' for Addition" << endl;
10          cout << "'-' for Subtraction" << endl;
11          cout << "'*' for Multiply" << endl;
12          cout << "'/' for Division" << endl;
13
14          cout << "\nEnter Your Choice: ";
15          cin >> select;
16          cout << "Enter the value of a:";
17          cin >> a;
18          cout << "Enter the value of b:";
19          cin >> b;
20
```

2017 – 6 – a – part – 2

```cpp
        cin >> b;

        switch (select)
        {
        case '+':
            res = a + b;
            cout << "Addition: " << res;
            break;

        case '-':
            res = a - b;
            cout << "Subtraction: " << res;
            break;

        case '*':
            res = a * b;
            cout << "Multiply: " << res;
            break;
```

2017 - 6 - a - part - 3

```cpp
        case '/':
            res = a / b;
            cout << "Division: " << res;
            break;

        default:
            cout << "invalid choice....";
    }

    return 0;
}
```

2017 – 7 – a

```cpp
#include<iostream>
using namespace std;
int main() {

    int num, temp = 0, revr = 0, i = 0;
    cin >> num;
    while (num != 0) {
        temp = num % 10;
        revr = revr*10 + temp;
        num /= 10;
    }
    cout << revr;

    return 0;

}
```

2017 – 7 – b

```cpp
#include<iostream>
using namespace std;
int main() {

    int r, c, s, n;
    cin >> n;
    for (r = n; r > 0; r--) {
        for (c = r; c > 0; c--) {
            cout << "*";
        }
        cout << endl;
    }


    return 0;
}
```