TDM-GCC 9.2.0 64-bit Release

(globals)

Project | Classes   Task 1.cpp ✕   Task 2.cpp ✕   Task 3.cpp ✕   Task 4.cpp ✕

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

    for(int i=10;i>0;i-=2)
    {
        for(int j=0;j<i;j++)
        {

        cout<<"*";
        }
    cout<<endl;
    }

}
void numbers()
{
    for(int i=3;i<=7;i++)
    {
        for(int j=0;j<i;j++)
        {

        cout<<i;
        }
    cout<<endl;
        }
}
```

```cpp
1    #include <iostream>
2    using namespace std;
3
4    void pattern(int n);
5
6
7    int main()
8    {
9        int n;
10       cout << "Enter a number greater than 5: ";
11       cin >> n;
12   if(n>5)
13   {
14
15       pattern(n);
16   }
17   else
18   cout<<"Enter a number greater than 5.";
19       return 0;
20   }
21   void pattern(int n)
22   {
23       if (n <= 5)
24   {
25       cout << "Please enter a number greater than 5." << endl;
26       return;
27   }
28
29
30       for (int i = 1; i <= n; i++)
31   {
32
33       for (int j = 1; j <= n - i; j++)
34   {
35       cout << " ";
36   }
37
38       for (int k = 1; k <= i; k++)
39   {
40       cout << "*";
41   }
42       cout << endl;
43   }
44
45     for (int i = n - 1; i >= 1; i--)
46   {
47
48       for (int j = 1; j <= n - i; j++)
49   {
50       cout << " ";
51   }
52
53       for (int k = 1; k <= i; k++)
54   {
55       cout << "*";
56   }
57       cout << endl;
58   }
59   }
```

Project   Classes   ◄ ► | Task 1.cpp ✕ | Task 2.cpp ✕ | Task 3.cpp ✕ | Task 4.cpp ✕

```cpp
#include <iostream>

using namespace std;

void checkNumber(int num) {
    cout << num << " is an integer." << endl;
}


void checkNumber(float num) {
    cout << num << " is a decimal (float) number." << endl;
}

int main() {

    float userInput;


    cout << "Enter a number: ";
    cin >> userInput;


    if (userInput == static_cast<int>(userInput)) {
        checkNumber(static_cast<int>(userInput));
    } else {
        checkNumber(userInput);
    }

    return 0;
}
```

```cpp
#include <iostream>

using namespace std;


void swap(int &a, int &b) {
    int temp = a;
    a = b;
    b = temp;
}

int main() {
    int num1 = 5, num2 = 10;


    cout << "Before swapping:" << endl;
    cout << "num1: " << num1 << ", num2: " << num2 << endl;


    swap(num1, num2);


    cout << "After swapping:" << endl;
    cout << "num1: " << num1 << ", num2: " << num2 << endl;

    return 0;
}
```