



Lesson 12 CPP Practice 2

In the last lesson , we learned how to print a triangle. Now we are going to print a reversed triangle:

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

int main() {
    int n;
    cout << "Please enter a number: ";
    cin >> n;
    for (int i = 1; i <= n; i++){
        //number of lines
        for (int j = i; j <= n; j++)
            //we putted i because the triangle should be reversed
            cout << "*";
        cout << endl;
    }
}
```

input:

3



output:

**

*

We can now try to solve this problem using a new function

substr(x) :

```
#include <iostream>
```

```
#include <string>
```

```
using namespace std;
```

```
int main() {
```

```
    string name = "ahmed";
```

```
    cout << name.substr(1) << endl;
```

```
    cout << name.substr(2) << endl;
```

```
    cout << name.substr(3) << endl;
```

```
    cout << name.substr(4) << endl;
```

```
}
```

output:

hmed

med

ed

d

Solution of the first problem :



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

int main() {
    string s;
    int n;
    cout << "Please enter a number: ";
    cin >> n;
    for (int i = 0; i < n; i++)
        s += "*";
    for (int i = 0; i < n; i++)
        cout << s.substr(i) << endl;
}
```

input:

5

output:

**

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