

Lab 2.3.5 Drawing squares (actually: rectangles)

Objectives

Familiarize the student with:

- using nested **for** loops;
- using non-conflicting control variable names;
- building properly formatted output.

Scenario

Look at the sample code below – it draws a shape pretending to be a rectangle (we would like to name it "square", but neither the monitor nor the printer can show it as a real square).

Your task is to modify the code to achieve the following goals:

- ask the user to enter a positive integer value greater than 1 (n);
- check the entered value and if it isn't legal, output a message stating the reason;
- draw a square with a side of n.

Find the reasonable upper limit for n (depending on your screen's dimensions) and embed it into your code.

```
#include <iostream>

using namespace std;

int main(void) {
    cout << '+';
    for(int i = 0; i < 4; i++)
        cout << '-';
    cout << '+' << endl;
    for(int i = 0; i < 4; i++) {
        cout << '|';
        for(int j = 0; j < 4; j++)
            cout << ' ';
        cout << '|' << endl;
    }
    cout << '+';
    for(int i = 0; i < 4; i++)
        cout << '-';
    cout << '+' << endl;
    return 0;
}
```

Example input

3

Example output

```
+++
| |
+++
```

Example input

8

Example output

```
+-----+  
|       |  
|       |  
|       |  
+-----+
```

Example input

```
100
```

Example output

```
Sorry, the side size is too big
```