



Checker Board

Write a C++ program that uses nested for loops to print the a "checker board" pattern. Refer to the example on the right.

This should be accomplished using only:

```
cout << "X";  
cout << " ";  
cout << "\n";
```

(ie. you cannot use `cout << "x x x x x ";`)

To determine if a number is even or odd, you can use:

```
if( i%2 == 0 )  
{  
    // Put your code here  
}  
else  
{  
    // Put your code here  
};
```

BONUS: Ask the user to input a number between 2 and 30 and make the checker board that size.

	1	2	3	4	5	6	7	8	9	10
1	X		X		X		X		X	
2		X		X		X		X		X
3	X		X		X		X		X	
4		X		X		X		X		X
5	X		X		X		X		X	
6		X		X		X		X		X
7	X		X		X		X		X	
8		X		X		X		X		X
9	X		X		X		X		X	
10		X		X		X		X		X

Solution

```
#include <iostream>
using namespace std;
int main()
{
    int width = 5; // This variable controls the size of the checker board
    for(int i = 1; i <= width; i++)
    {
        for(int j = 1; j <= width; j++)
        {
            if(i%2 == 0)
            {
                if(j%2 == 0)
                {
                    cout << "X";
                }
                else
                {
                    cout << " ";
                }
            }
            else
            {
                if(j%2 == 0)
                {
                    cout << " ";
                }
                else
                {
                    cout << "X";
                }
            }
        }
        cout << "\n";
    }
    return 0;
}
```