

Lab Task # 5

Q1. Write a program that prints a 5×5 grid of alphabets (A to E in each row) using nested for loops.

Solution:

```
#include<iostream>

using namespace std;

int main() {

    int a;

    char n;

    for (a = 1; a <= 5; a++)

    {

        for (n = 'A'; n <= 'E'; n++)

        {

            cout << n;

        }

        cout << endl;

    }

    return 0;

}
```



Q2. Write a program that prints an inverted right triangle pattern of stars using nested for loops.

Solution:

```
#include<iostream>

using namespace std;

int main() {
    int s, t;
    for (s = 5; s >= 1; s--)
    {
        for (t = 1; t <= s; t++)
        {
            cout << "*";
        }
        cout << endl;
    }
    return 0;
}
```



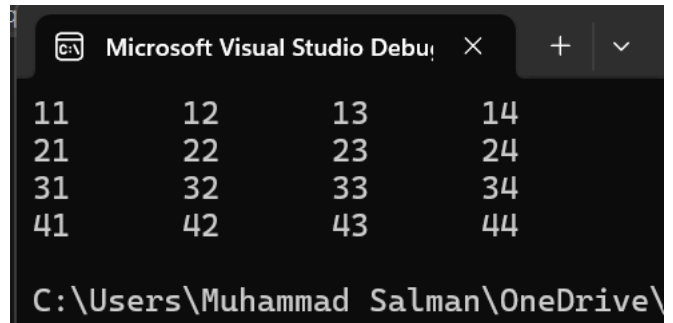
Q3. Write a program using nested for loops to display all possible two-digit combinations of numbers within the range 1 to 4.

Solution:

```
#include <iostream>

using namespace std;

int main() {
    for (int a = 1; a <= 4; a++)
    {
        for (int b = 1; b <= 4; b++)
        {
            cout << a << b << "\t";
        }
        cout << endl;
    }
    return 0;
}
```



The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output displays a 4x4 grid of two-digit numbers, where the first digit represents 'a' and the second digit represents 'b'. The numbers are: 11, 12, 13, 14 in the first row; 21, 22, 23, 24 in the second row; 31, 32, 33, 34 in the third row; and 41, 42, 43, 44 in the fourth row. The console path at the bottom is "C:\Users\Muhammad Salman\OneDrive\".

11	12	13	14
21	22	23	24
31	32	33	34
41	42	43	44