Lab Assignment 5

Exercise 1

;What is the expected output of the following program?

```c
#include <stdio.h>

int main()
{

    int i = 0;
    for (int i = 0; i < 5; i++) {
        for (int j = 0; j < 3; j++) {
            // This inner loop will break when i==3
            if (i == 3) {
                break;
            }
            printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

OUT PUT:

Exercise 2

Write a program in C to create the following number pattern using nested loops.

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```c
#include <stdio.h>

int main() {
    int rows, i, j;

    // Get the number of rows from the user
    printf("Enter the number of rows: ");
    scanf("%d", &rows);

    // Input validation: Ensure rows is positive
    if (rows <= 0) {
        printf("Number of rows must be a positive integer.\n");
        return 1; // Return an error code
    }

    // Use nested loops to print the number pattern
    for (i = 1; i <= rows; i++) {
        for (j = 1; j <= i; j++) {
            printf("%d ", j); // Print the number and a space
        }
        printf("\n"); // Move to the next line after each row
    }

    return 0; // Indicate successful execution
}
```

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