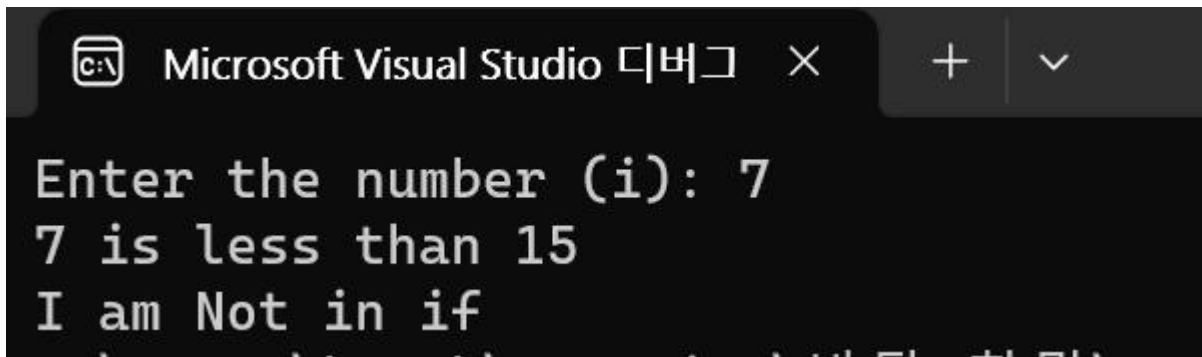


실습 1.

```
#include <stdio.h>
```

```
int main() {  
    int i = 0;  
  
    printf("Enter the number (i): ");  
    scanf("%d", &i);  
  
    if (i < 15)  
        printf("%d is less than 15\n", i);  
    printf("I am Not in if");  
    return 0;  
}
```

실습 1 실행 화면.

A screenshot of the Microsoft Visual Studio integrated development environment. The title bar at the top shows the Visual Studio icon, the text "Microsoft Visual Studio 디버거", and standard window controls (close, maximize, and a split view button). The console window is open, displaying the output of the program. The text in the console is: "Enter the number (i): 7", "7 is less than 15", and "I am Not in if". The text is white on a dark background.

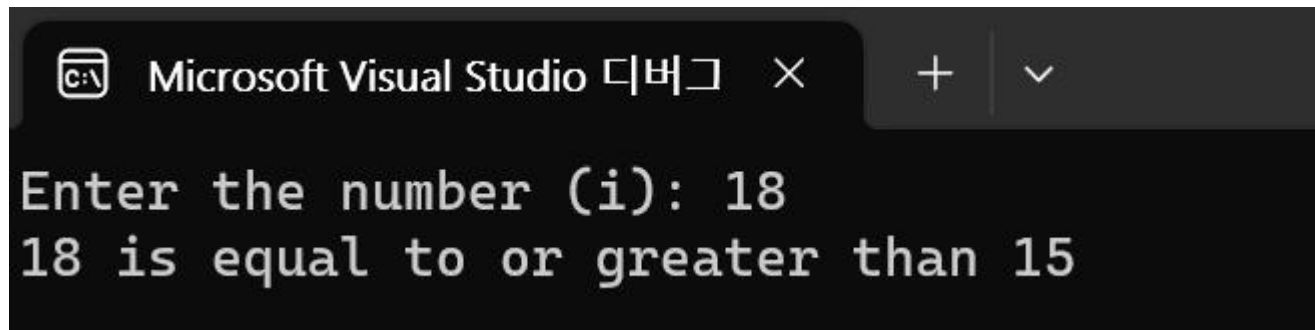
```
Microsoft Visual Studio 디버거 × + ∨  
Enter the number (i): 7  
7 is less than 15  
I am Not in if
```

실습 2.

```
#include <stdio.h>
```

```
int main() {  
    int i = 0;  
  
    printf("Enter the number (i): ");  
    scanf("%d", &i);  
  
    if (i < 15)  
        printf("%d is less than 15\n", i);  
    else  
        printf("%d is equal to or greater than 15\n", i);  
    return 0;  
}
```

실습 2 실행 화면.

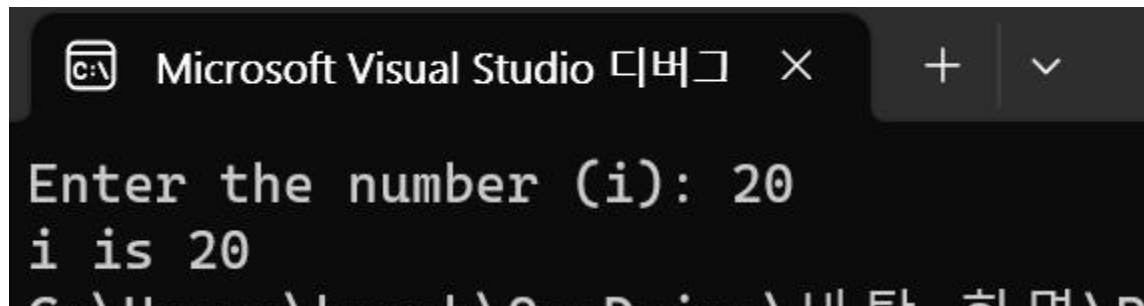
The image shows a screenshot of the Microsoft Visual Studio debugger interface. At the top, the title bar reads 'Microsoft Visual Studio 디버거' with a close button. Below the title bar, the output window displays the program's execution results. The first line of output is 'Enter the number (i): 18', and the second line is '18 is equal to or greater than 15'. The text is displayed in a monospaced font on a dark background.

실습 3.

```
#include <stdio.h>
```

```
int main() {  
    int i = 0;  
    printf("Enter the number (i): ");  
    scanf("%d", &i);  
  
    if (i == 10)  
        printf("i is 10");  
    else if (i == 15)  
        printf("i is 15");  
    else if (i == 20)  
        printf("i is 20");  
    else  
        printf("i is not present");  
    return 0;  
}
```

실습 3 실행 화면.

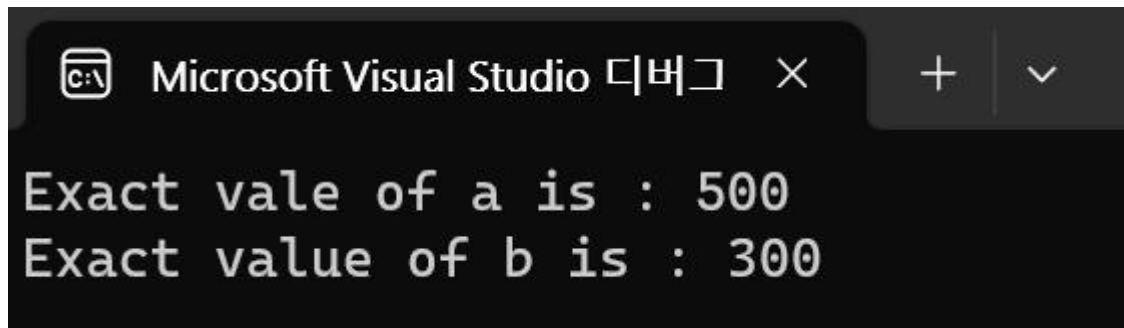


실습 4.

```
#include <stdio.h>
```

```
int main() {  
    int a = 500;  
    int b = 300;  
  
    if (a == 100) {  
        if (b == 200) {  
            printf("Value of a is 100 and b is 200\n");  
        }  
    }  
  
    printf("Exact vale of a is : %d\n", a);  
    printf("Exact value of b is : %d\n", b);  
  
    return 0;  
}
```

실습 4 실행 화면.

The image shows a screenshot of the Microsoft Visual Studio debugger's output window. The window title is "Microsoft Visual Studio 디버깅" (Microsoft Visual Studio Debugging). The output text is displayed in a monospaced font on a dark background. It shows the results of the program's execution: "Exact vale of a is : 500" and "Exact value of b is : 300".

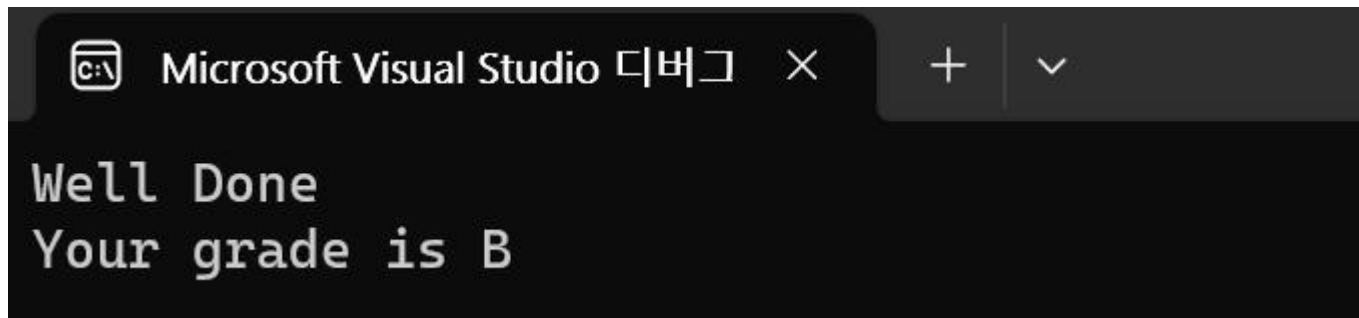
```
Microsoft Visual Studio 디버깅 ×  
+  
Exact vale of a is : 500  
Exact value of b is : 300
```

실습 5.

```
#include <stdio.h>
```

```
int main() {  
    char grade = 'B';  
    switch (grade) {  
        case 'A':  
            printf("Excellent!\n");  
            break;  
        case 'B':  
        case 'C':  
            printf("Well Done\n");  
            break;  
        case 'D':  
            printf("You passed\n");  
            break;  
        case 'F':  
            printf("Better try again\n");  
            break;  
        default:  
            printf("Invalid grade\n");  
    }  
    printf("Your grade is %c\n", grade);  
    return 0;  
}
```

실습 5 실행 화면.



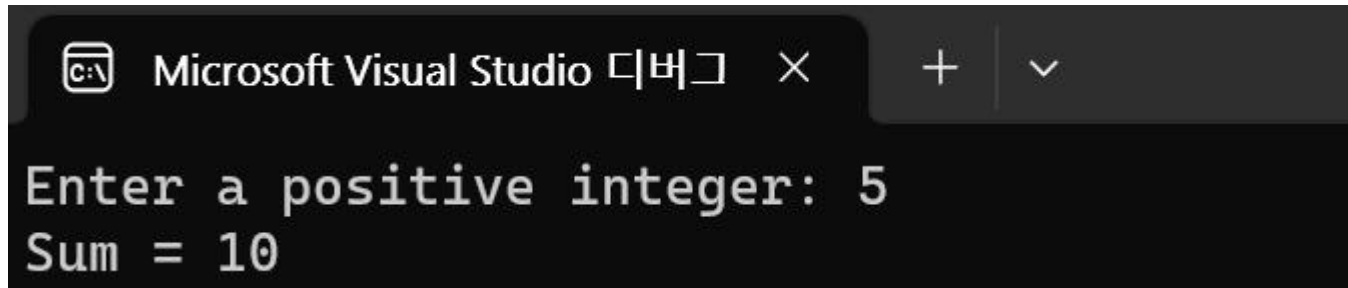
The screenshot shows the Microsoft Visual Studio debug console. The title bar at the top reads "Microsoft Visual Studio 디버그" with a close button. The console output displays two lines: "Well Done" and "Your grade is B".

실습 6.

```
#include <stdio.h>
```

```
int main() {  
    int num, count, sum = 0;  
  
    printf("Enter a positive integer: ");  
    scanf("%d", &num);  
  
    // for loop terminates when num is less than count  
    for (count = 1; count < num; count++) {  
        sum += count; // sum = sum + count;  
    }  
  
    printf("Sum = %d", sum);  
  
    return 0;  
}
```

실습 6 실행 화면.



```
Microsoft Visual Studio 디버그 × + ▾  
Enter a positive integer: 5  
Sum = 10
```

실습 7.

#include &lt;stdio.h&gt;

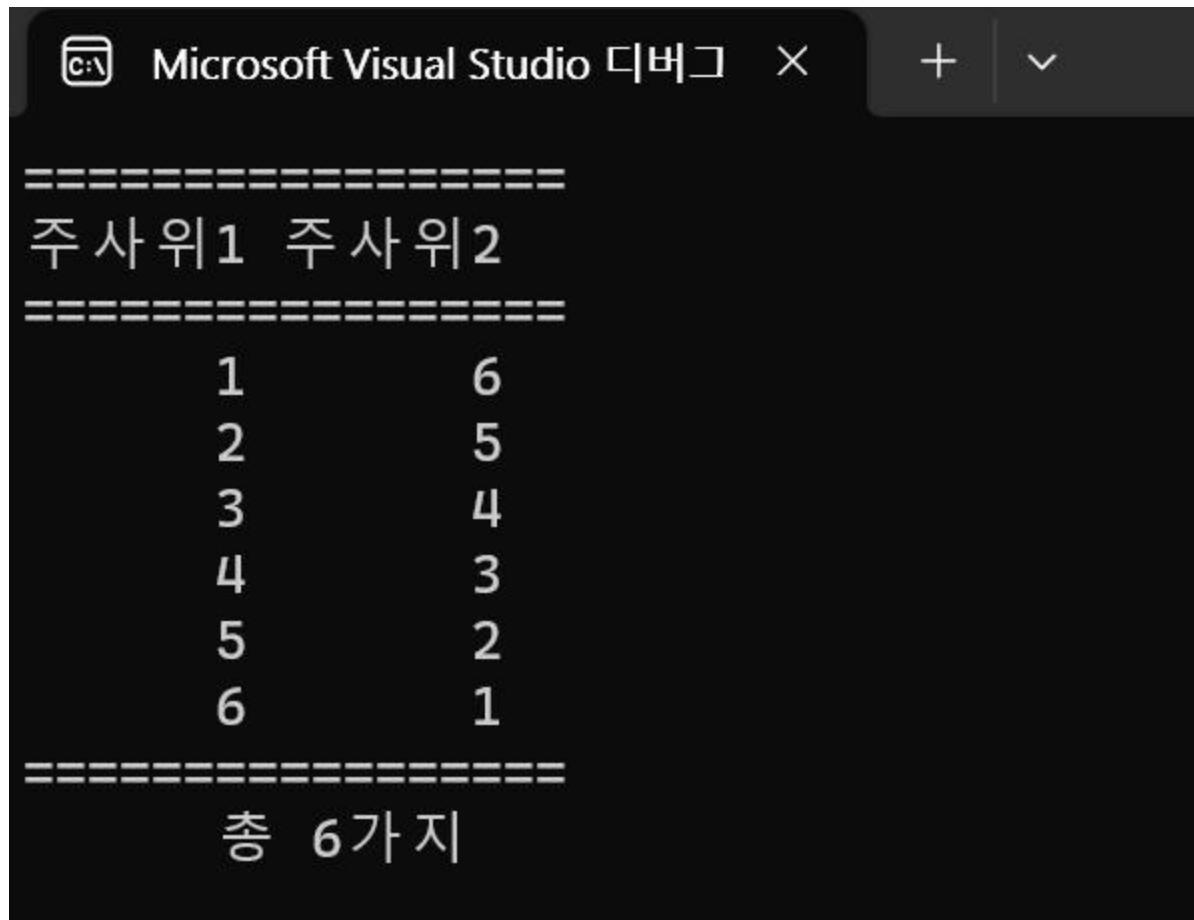
```

int main() {
    int dice1, dice2, cnt = 0;

    printf("=====\n");
    printf("주사위1 주사위2\n");
    printf("=====\n");
    for (dice1 = 1; dice1 < 7; dice1++) {
        for (dice2 = 1; dice2 < 7; dice2++) {
            if (7 - dice1 == dice2) {
                printf("%7d %7d\n", dice1, dice2);
                cnt++;
            }
        }
    }
    printf("=====\n");
    printf("      총 %d가지\n", cnt);
    return 0;
}

```

실습 7 실행 화면.



```

=====
주사위1 주사위2
=====
      1      6
      2      5
      3      4
      4      3
      5      2
      6      1
=====
      총 6가지

```

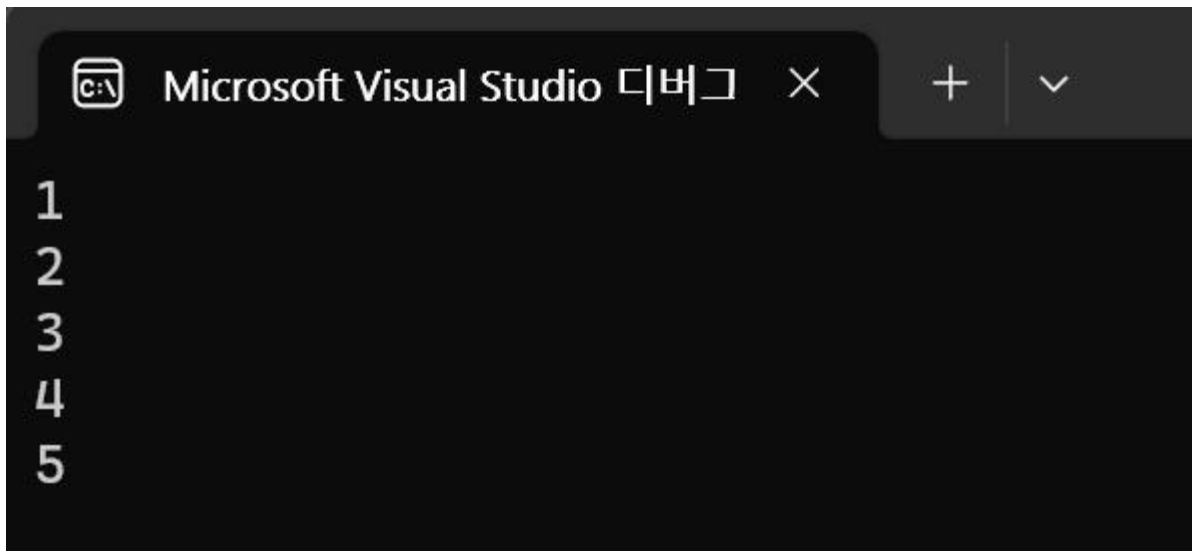
실습 8.

```
// Print numbers from 1 to 5
```

```
#include <stdio.h>
```

```
int main() {  
    int i = 1;  
  
    while (i <= 5) {  
        printf("%d\n", i);  
        ++i;  
    }  
  
    return 0;  
}
```

실습 8 실행 화면.

A screenshot of the Microsoft Visual Studio IDE. The title bar at the top shows the Visual Studio icon, the text "Microsoft Visual Studio 디버거", and window control buttons (close, maximize, and a split view button). The main area is a dark-themed console window displaying the output of the program. The output consists of five lines, each containing a number from 1 to 5, printed vertically. The numbers are white on a black background.



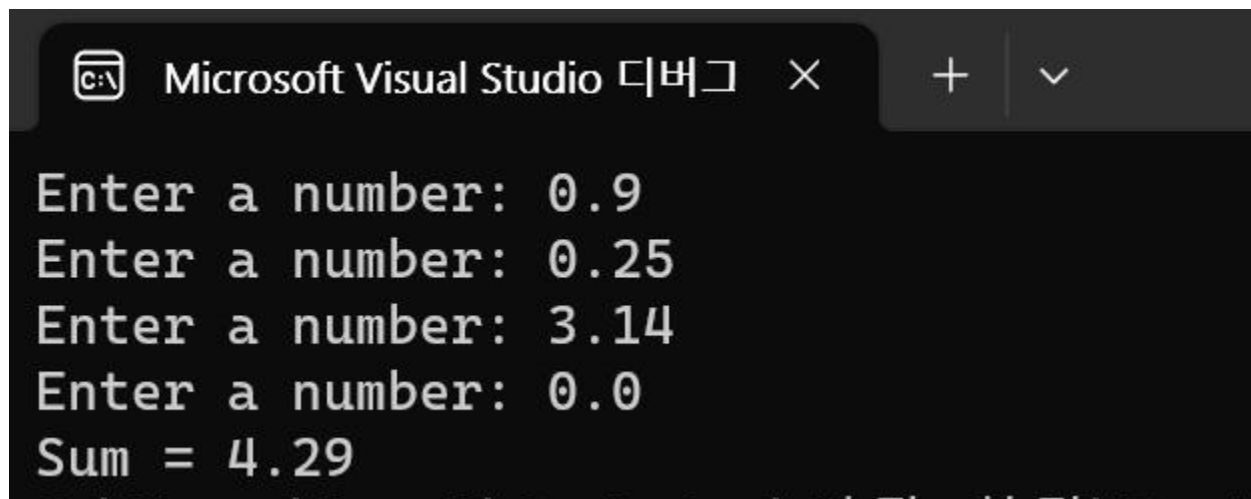
실습 9.

// Program to add numbers untill the user enters zero

#include <stdio.h>

```
int main() {  
    double number, sum = 0;  
  
    do {  
        printf("Enter a number: ");  
        scanf("%lf", &number);  
        sum += number;  
    } while (number != 0.0);  
  
    printf("Sum = %.2lf", sum);  
  
    return 0;  
}
```

실습 9 실행 화면.



```
Microsoft Visual Studio 디버그 × + v  
Enter a number: 0.9  
Enter a number: 0.25  
Enter a number: 3.14  
Enter a number: 0.0  
Sum = 4.29
```

실습 10.

```
// Program to calculate the sum of numbers (10 numbers max)
// If the user enters a negative number, the loop terminates
#include <stdio.h>
```

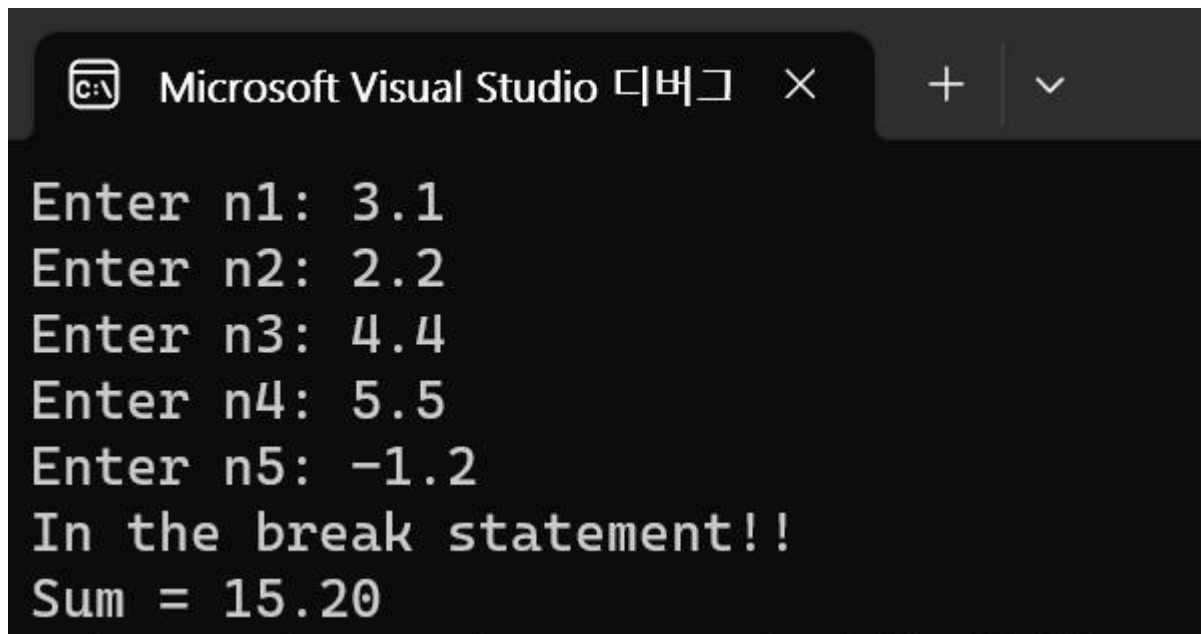
```
int main() {
    int i;
    double number, sum = 0.0;

    for (i = 1; i <= 10; ++i) {
        printf("Enter n%d: ", i);
        scanf("%lf", &number);

        // if the user enters a negative number, break the loop
        if (number < 0.0) {
            printf("In the break statement!!\n");
            break;
        }
        sum += number; // sum = sum + number;
    }
    printf("Sum = %.2lf", sum);

    return 0;
}
```

실습 10 실행 화면.



```
Microsoft Visual Studio 디버그
Enter n1: 3.1
Enter n2: 2.2
Enter n3: 4.4
Enter n4: 5.5
Enter n5: -1.2
In the break statement!!
Sum = 15.20
```

## 실습 11

```
// Program to calculate the sum of numbers (10 numbers max)
// If the enters a negative number, it's not added to the result
#include <stdio.h>
```


```
int main() {
    int i;
    double number, sum = 0.0;

    for (i = 1; i <= 10; ++i) {
        printf("Enter n%d: ", i);
        scanf("%lf", &number);

        // if the user enters a negative number, break the loop
        if (number < 0.0) {
            continue;
        }
        sum += number; // sum = sum + number;
    }
    printf("Sum = %.2lf", sum);

    return 0;
}
```

실습 11 실행 화면.



```
Microsoft Visual Studio 디버거 × + ▾

Enter n1: 1
Enter n2: -1
Enter n3: 2
Enter n4: -2
Enter n5: 3
Enter n6: -3
Enter n7: 4
Enter n8: -4
Enter n9: 5
Enter n10: -5
Sum = 15.00
```

실습 12.

// Program to calculate the sum and average of positive numbers  
 // If the user enters a negative number, the sum and average are displayed.

```
#include <stdio.h>
```

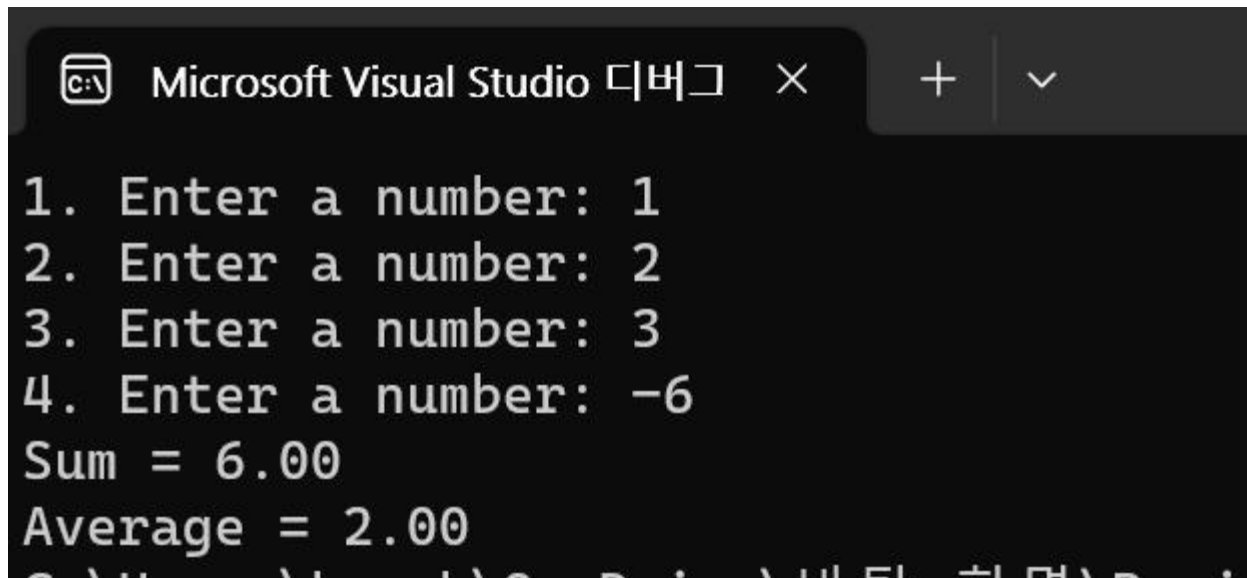
```
int main() {
    const int maxinput = 100;
    int i;
    double number, average, sum = 0.0;

    for (i = 1; i <= maxinput; ++i) {
        printf("%d. Enter a number: ", i);
        scanf("%lf", &number);

        // go to jump if the user enters a negative number
        if (number < 0.0) {
            goto jump;
        }
        sum += number;
    }
jump:
    average = sum / (i - 1);
    printf("Sum = %.2f\n", sum);
    printf("Average = %.2f", average);

    return 0;
}
```

실습 12 실행 화면.



```
Microsoft Visual Studio 디버그
1. Enter a number: 1
2. Enter a number: 2
3. Enter a number: 3
4. Enter a number: -6
Sum = 6.00
Average = 2.00
```