1.

- Two integers (a, b)
- **Process**:
  Add the two integers → sum = a + b
- **Output**:
  Sum of the two integers

```c
#include <stdio.h>
void main()
{
    int num1, num2, sum;
    scanf("%d%d", &num1,&num2);
    sum = num1 + num2;
    printf("Sum = %d\n", sum);
}
```

STDIN

2

Output:

Sum = 7

2.

- **Input:** The user enters two integer values, a and b.
- **Process:** The values of a and b are swapped using a temporary variable temp.
- **Output:** The program displays the new values of a and b after swapping.

```c
#include<stdio.h>
void main()
{
    int a, b, temp;
    scanf("%d%d", &a, &b);
    temp = a;
    a = b;
    b = temp;

    printf("After swapping:\n");
    printf("First number = %d\n", a);
    printf("Second number = %d\n", b);

}
```

STDIN

2

Output:

After swapping:
First number = 7
Second number = 2

3.

 Input: Read two integers a and b from the user.

 Process: Swap the values using arithmetic operations:

- a = a + b;
- b = a - b;
- a = a - b;

 Output: Display the values of a and b after swapping.

```c
#include <stdio.h>

void main()
{
    int a, b;
    scanf("%d%d", &a,&b);
    a = a + b;
    b = a - b;
    a = a - b;

    printf("After swapping:\n");
    printf("First number = %d\n", a);
    printf("Second number = %d\n", b);

}
```

```
3
4

Output:

After swapping:
First number = 4
Second number = 3
```

4.

- **Input:** Read a single character from the user.
- **Process:** Convert the character to its corresponding ASCII value (every character in C has an integer ASCII value).
- **Output:** Display the ASCII value of the entered character.

5.

 Input: The user enters two characters together (e.g., a and b) in a single scanf.

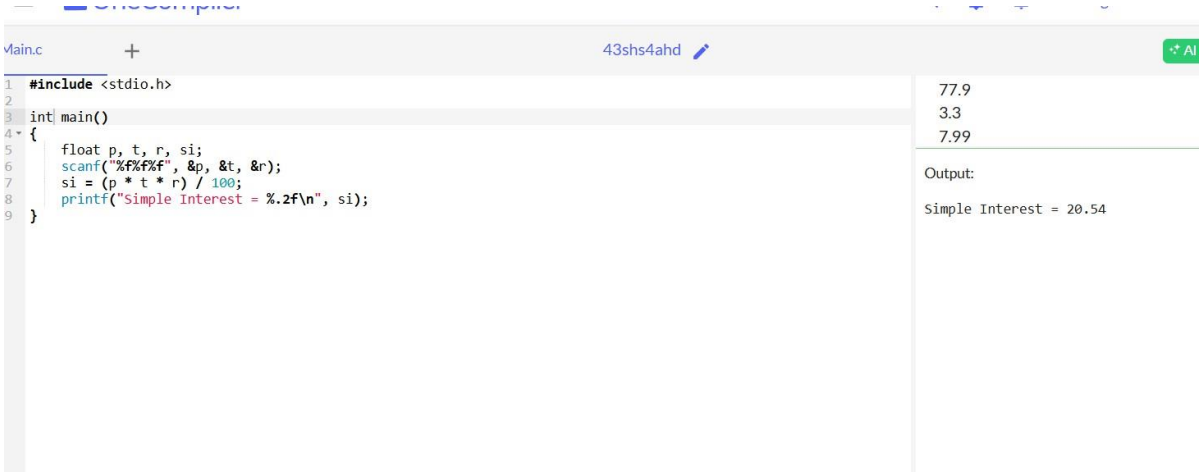
 Process: Each character is automatically converted to its corresponding ASCII value using the %d format in printf.

 Output: The program displays the ASCII value of each entered character.

6.

 Input: Read three float values: principal amount (p), time (t in years), and rate of interest (r).\ **Process:** Calculate simple interest using the formula:
Simple Interest = (p × t × r) / 100

 Output: Display the calculated simple interest value.

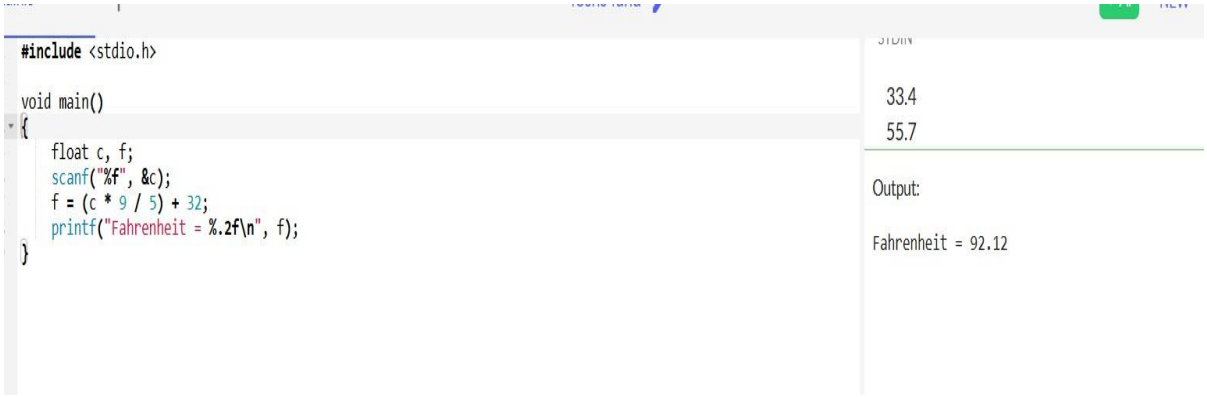


7.

 Input: Read the temperature in Celsius.

 Process: Convert the temperature to Fahrenheit using the formula: Fahrenheit = (Celsius × 9 / 5) + 32

 Output: Display the equivalent temperature in Fahrenheit.



```c
#include <stdio.h>

void main()
{
    float c, f;
    scanf("%f", &c);
    f = (c * 9 / 5) + 32;
    printf("Fahrenheit = %.2f\n", f);
}
```

```
33.4
55.7

Output:

Fahrenheit = 92.12
```

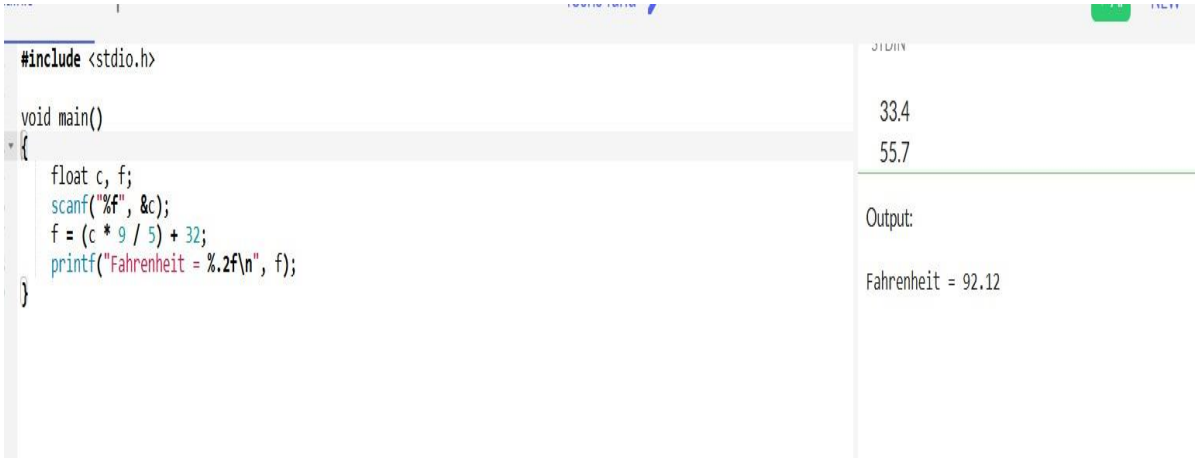
8.

 Input: Read two integers: dividend (a) and divisor (b).

 Process:

- Calculate quotient using integer division: q = a / b
- Calculate remainder using modulo: r = a % b

 Output: Display the quotient and remainder.



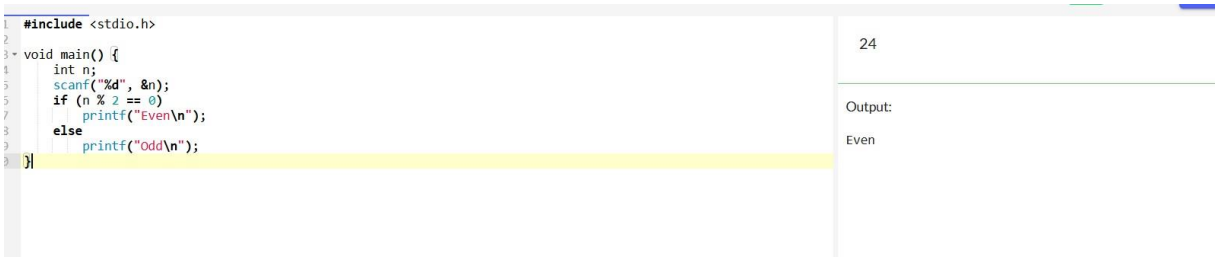
9.

 Input: Read an integer number from the user.

 Process: Check if the number is divisible by 2 using n % 2.

- If remainder is 0 → Even
- Else → Odd

 Output: Print "Even" or "Odd" based on the condition.



10.

- **Input:** The user enters a single integer number.
- **Process:**
  - Calculate the **square** by multiplying the number by itself: square = n × n
  - Calculate the **cube** by multiplying the number by itself twice: cube = n × n × n
- **Output:** Display the square and cube values of the entered number.