

Simple Code

Aim:

To Write a simple code to get two variable one as integer and another as float. Display the given value as output also print the size of both the variables. Perform all stages of compilation process one by one (preprocessing, Compiling, assembling, linking)

Program:

```
//Documentation Section

/*
 * Simple Code to Get INTEGER and FLOAT and Size of both
 * Author : MUTHUGANESH S
 * Date   : 07/01/2026
 * File name: SimpleCode.c
 * retval  : void
 */

//Preprocessor Section
#include <stdio.h>

//Main Section
int main() {
    //variable declaration
    int IntValue;
    float FloatValue;

    printf("Enter an integer value: ");
    scanf("%d", &IntValue);
    printf("Enter a float value: ");
    scanf("%f", &FloatValue);

    printf("You entered integer: %d\n", IntValue);
    printf("You entered float: %f\n", FloatValue);

    printf("Size of integer: %zu bytes\n", sizeof(IntValue));
    printf("Size of float: %zu bytes\n", sizeof(FloatValue));

    return 0;
}
```

Output:

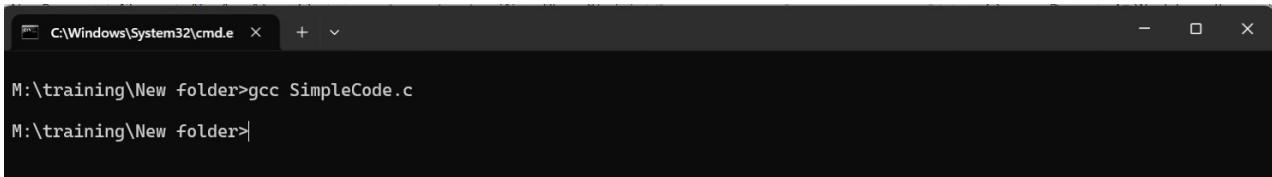
The screenshot shows a Windows desktop environment. On the left is a code editor window titled 'SimpleCode.c X' containing the C code provided above. On the right is a terminal window titled 'C:\Windows\System32\cmd.e' showing the execution of the code. The terminal output is as follows:

```
M:\training\New folder>gcc SimpleCode.c
M:\training\New folder>SimpleCode
Enter an integer value: 12
Enter a float value: 12.234000
You entered integer: 12
You entered float: 12.234000
Size of integer: 4 bytes
Size of float: 4 bytes
```

Step by Step:

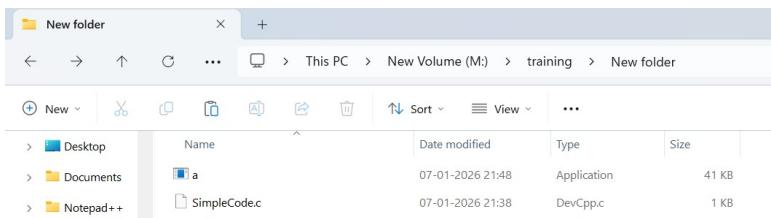
1. For compiling

M:\training\New folder>gcc SimpleCode.c



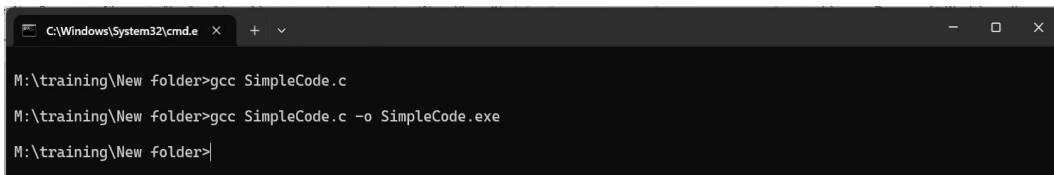
```
C:\Windows\System32\cmd.e M:\training\New folder>gcc SimpleCode.c M:\training\New folder>
```

Now we can see the exe file with a



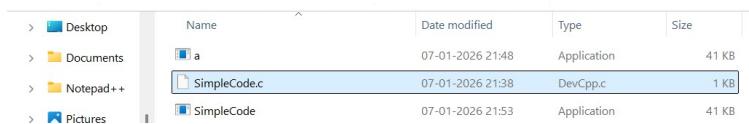
2. For Linking

M:\training\New folder>gcc SimpleCode.c -o SimpleCode.exe

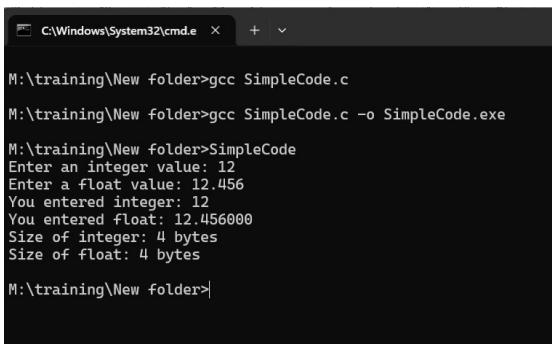


```
C:\Windows\System32\cmd.e M:\training\New folder>gcc SimpleCode.c M:\training\New folder>gcc SimpleCode.c -o SimpleCode.exe M:\training\New folder>
```

Now we can see with the name



M:\training\New folder>SimpleCode



```
C:\Windows\System32\cmd.e M:\training\New folder>gcc SimpleCode.c M:\training\New folder>gcc SimpleCode.c -o SimpleCode.exe M:\training\New folder>SimpleCode Enter an integer value: 12 Enter a float value: 12.456 You entered integer: 12 You entered float: 12.456000 Size of integer: 4 bytes Size of float: 4 bytes M:\training\New folder>
```

3. For showing the warning

M:\training\New folder>gcc -Wall SimpleCode.c

```
M:\training\New folder>gcc -Wall SimpleCode.c
SimpleCode.c: In function 'main':
SimpleCode.c:28:31: warning: unknown conversion type character 'z' in format [-Wformat=
    printf("Size of integer: %zu bytes\n", sizeof(IntValue));
                                ^
SimpleCode.c:28:12: warning: too many arguments for format [-Wformat-extra-args]
    printf("Size of integer: %zu bytes\n", sizeof(IntValue));
                                ^
SimpleCode.c:29:29: warning: unknown conversion type character 'z' in format [-Wformat=
    printf("Size of float: %zu bytes\n", sizeof(FloatValue));
                                ^
SimpleCode.c:29:12: warning: too many arguments for format [-Wformat-extra-args]
    printf("Size of float: %zu bytes\n", sizeof(FloatValue));
                                ^
```

4. For Preprocessor Stage

M:\training\New folder>gcc -E SimpleCode.c -o SimpleCode.I

Name	Date modified	Type	Size
a	07-01-2026 21:57	Application	41 KB
SimpleCode.c	07-01-2026 21:38	DevCpp.c	1 KB
SimpleCode	07-01-2026 21:53	Application	41 KB
SimpleCode.i	07-01-2026 22:00	I File	22 KB

5. For compilation Stage

M:\training\New folder>gcc -S SimpleCode.c -o SimpleCode.s

Name	Date modified	Type	Size
a	07-01-2026 21:57	Application	41 KB
SimpleCode.c	07-01-2026 21:38	DevCpp.c	1 KB
SimpleCode	07-01-2026 21:53	Application	41 KB
SimpleCode.i	07-01-2026 22:00	I File	22 KB
SimpleCode.s	07-01-2026 22:02	S File	2 KB

6. For Assembly Stage

M:\training\New folder>gcc -C SimpleCode.c -o SimpleCode.o

Name	Date modified	Type	Size
a	07-01-2026 21:57	Application	41 KB
SimpleCode.c	07-01-2026 21:38	DevCpp.c	1 KB
SimpleCode	07-01-2026 21:53	Application	41 KB
SimpleCode.i	07-01-2026 22:00	I File	22 KB
SimpleCode.o	07-01-2026 22:03	O File	41 KB
SimpleCode.s	07-01-2026 22:02	S File	2 KB