Aim:

Write a program to print the `multiplication table` for a given number with the number of rows in the table.

For example, for a number `2` with `3` rows, the output should be:

```
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
```

At the time of execution, the program should print the following messages one by one on the console as:

```
Enter an integer number :
Enter number of rows :
```

For example, if the user gives the **input** as:

```
Enter an integer number : 5
Enter number of rows : 4
```

then the program should **print** the result as:

```
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
```

Note: Do use the **printf()** function with a **newline** character (`\n`).

Source Code:

Program411.c

```c
// c program to print the multiplication table for a given number
// written by naveena
// taught by faculty
// date:-26/12/2022
//filename:-multiplicationtable.c
#include<stdio.h>
void  main()
{
    int num,rows,table,i;
    printf("Enter an integer number : ");
    scanf("%d",&num);
    printf("Enter number of rows : ");
    scanf("%d",&rows);
    for(i=1;i<=rows;i++)
    {
        table=num*i;
        printf("%d * %d = %d\n",num,i,table);
    }

}
```

Execution Results - All test cases have succeeded!

Test Case - 1

User Output
Enter an integer number : 3
Enter number of rows : 6
3 * 1 = 3
3 * 2 = 6
3 * 3 = 9
3 * 4 = 12
3 * 5 = 15
3 * 6 = 18

Test Case - 2

User Output
Enter an integer number : 5
Enter number of rows : 4
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20

Test Case - 3

User Output
Enter an integer number : 12
Enter number of rows : 7
12 * 1 = 12
12 * 2 = 24
12 * 3 = 36
12 * 4 = 48
12 * 5 = 60
12 * 6 = 72
12 * 7 = 84

Test Case - 4

User Output
Enter an integer number : 15
Enter number of rows : 10
15 * 1 = 15
15 * 2 = 30
15 * 3 = 45
15 * 4 = 60
15 * 5 = 75
15 * 6 = 90
15 * 7 = 105
15 * 8 = 120
15 * 9 = 135
15 * 10 = 150