

Computer Programming

Lab4

Apr. 3, 2025



Ex3

- Write a simple integer arithmetic calculator (+ , - , * , / , %).
Print an error message for unsupported operators.

Ex3

- **Program output**

```
[ohyong@cse Lab4]$ vi ex4_3.c
[ohyong@cse Lab4]$ gcc ex4_3.c -o ex4_3
[ohyong@cse Lab4]$ ./ex4_3
Enter the formula: 20+5
25
[ohyong@cse Lab4]$ ./ex4_3
Enter the formula: 4-10
-6
[ohyong@cse Lab4]$ ./ex4_3
Enter the formula: 3*17
51
[ohyong@cse Lab4]$ ./ex4_3
Enter the formula: 23/4
5
[ohyong@cse Lab4]$ ./ex4_3
Enter the formula: 23%4
3
[ohyong@cse Lab4]$ ./ex4_3
Enter the formula: 10^5
You entered an unsupported operator.
```

Ex extra1

- Write a program to read in a integer number, and check that the number is within the range of 0 to 9. If the number is not within the range of 0 to 9 (inclusive), ask the user to enter the number again and repeat this until the number is within the range of 0 to 9. When the number is within the range of 0 to 9, print out the number.
 - Use *do-while* loop.

Ex extra1

- **Program output**

```
[ohyong@cse Lab4]$ vi ex4_extra1.c
[ohyong@cse Lab4]$ gcc ex4_extra1.c -o ex4_extra1
[ohyong@cse Lab4]$ ./ex4_extra1
Enter a number between 0 and 9: 13
Your number is not in the range 0 to 9! Try again.
Enter a number between 0 and 9: -5
Your number is not in the range 0 to 9! Try again.
Enter a number between 0 and 9: 7
You entered: 7

[ohyong@cse Lab4]$ ./ex4_extra1
Enter a number between 0 and 9: 6
You entered: 6

[ohyong@cse Lab4]$ ./ex4_extra1
Enter a number between 0 and 9: 9
You entered: 9
```

Ex extra2

- Write a program that inputs the upper case to be printed on the last line and prints it as output.

Ex extra2



- **Program output**

```
[ohyong@cse Lab4]$ vi ex4_extra2.c
[ohyong@cse Lab4]$ gcc ex4_extra2.c -o ex4_extra2
[ohyong@cse Lab4]$ ./ex4_extra2
Enter an upper case character you want to print in the last row: K
A
B B
C C C
D D D D
E E E E E
F F F F F F
G G G G G G G
H H H H H H H H
I I I I I I I I I
J J J J J J J J J J
K K K K K K K K K K K

[ohyong@cse Lab4]$ ./ex4_extra2
Enter an upper case character you want to print in the last row: G
A
B B
C C C
D D D D
E E E E E
F F F F F F
G G G G G G G
```

Submission

- **Submit to server**

At the end of the Lab4, submit your C sources file by typing

`~gs1401/bin/submit Lab4_2 ex4_3.c ex4_extra1.c ex4_extra2.c // by Thur 11:50`

You may check that you have submitted your source code correctly by typing

`~gs1401/bin/submit -check`