

Computer Programming

Quiz1

Apr. 20, 2022



Problem 1

- Write a program that receives integers until 0 is input and outputs the number and average of even numbers (except 0), and the number and average of odd numbers.

Problem 1

- **Program output**

```
[ohyong@newton Quiz1_s456]$ vi pr1.c
[ohyong@newton Quiz1_s456]$ gcc pr1.c -o pr1
[ohyong@newton Quiz1_s456]$ ./pr1
Enter integers. Enter 0 to stop entering integers : 2
4
5
0
```

Result

Number of evens: 2 average: 3

Number of odds: 1 average: 5

```
[ohyong@newton Quiz1_s456]$ ./pr1
Enter integers. Enter 0 to stop entering integers : 3 -4 -2 5 0
```

Result

Number of evens: 2 average: -3

Number of odds: 2 average: 4

```
[ohyong@newton Quiz1_s456]$ ./pr1
Enter integers. Enter 0 to stop entering integers : 1 3 7 4 2
0
```

Result

Number of evens: 2 average: 3

Number of odds: 3 average: 3.66667

Problem 2

- Write a program that draws the following pattern using a nested loop after receiving a positive integer num value. If you simply draw using the printf() function, you get 0 points.

Problem 2

- Program output

```
[ohyong@newton Quiz1_s456]$ vi pr2.c
[ohyong@newton Quiz1_s456]$ gcc pr2.c -o pr2 -std=c99
[ohyong@newton Quiz1_s456]$ ./pr2
Enter the num: 5

*
**
***
****
*****
```

```
[ohyong@newton Quiz1_s456]$ ./pr2
Enter the num: 6

*
**
***
****
*****
*****
```

```
[ohyong@newton Quiz1_s456]$ ./pr2
Enter the num: 9

*
**
***
****
*****
*****
*****
*****
*****
*****
```

Problem 3

- Write a program that takes as input a positive integer less than or equal to 1 million and outputs the number in reverse order.

Problem 3

- **Program output**

```
[ohyong@newton Quiz1_s456]$ vi pr3.c  
[ohyong@newton Quiz1_s456]$ gcc pr3.c -o pr3 -std=c99  
[ohyong@newton Quiz1_s456]$ ./pr3  
Input an integer: 12345  
The number in reverse order is : 54321
```

```
[ohyong@newton Quiz1_s456]$ ./pr3  
Input an integer: 123456789  
The number in reverse order is : 987654321
```

Submission

- **Submit to Newton server**

At the end of the Quiz1, submit your C source file by typing

```
~gs1401/bin/submit Quiz1_s456 pr1.c pr2.c pr3.c // due : 11:30 am
```

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

```
~gs1401/bin/submit -check
```