

## Lab8

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### Part1

4) break 6 (line number was 6)

4) run

6)

	1 <sup>st</sup> Iteration	2 <sup>nd</sup> Iteration	3 <sup>rd</sup> Iteration	4 <sup>th</sup> Iteration
num	112	11	1	0
rev_num	5	52	521	5211

8) reverse the given number ex) 1125 -> 5211

### Part2

1) Errors during compiling

```
[hlee152@gsuad.gsu.edu@snowball ~]$ vi q2.c
[hlee152@gsuad.gsu.edu@snowball ~]$ gcc -o q2 -g q2.c
q2.c: In function 'main':
q2.c:11:2: error: stray '\' in program
  while((character=getchar()) != \n){
  ^
q2.c:11:34: error: 'n' undeclared (first use in this function)
  while((character=getchar()) != \n){
                                ^
q2.c:11:34: note: each undeclared identifier is reported only once for each function it
appears in
q2.c:13:8: error: 'space' undeclared (first use in this function)
  if(!space){
    ^
[hlee152@gsuad.gsu.edu@snowball ~]$
```

Line 11: != \n → != '\n'

Line 13: declare 'space' → int space;

## 2) After running program

```
Enter a Sentence: It was deja vu all over again.  
Average word length : 0.0[Inferior 1 (process 7850) exited normally]
```

```
Enter a Sentence: It was deja vu all over gain.  
14         if(character != ' ')  
(gdb) n  
16             if(!space)  
(gdb) n  
18                 words++;  
(gdb) n  
19                 space = 1;  
(gdb) n  
21                 letters++;  
(gdb) n  
12         while((character=getchar()) != '\n')  
(gdb) n  
14             if(character != ' ')  
(gdb) n  
16                 if(!space)  
(gdb) n  
21                     letters++;  
(gdb) n  
12         while((character=getchar()) != '\n')  
(gdb) █
```

Incorrect output with infinite loop.

To int letters, int space, int words, we need to initialize default value to each variable.

```
Int letters = 0;
```

```
Int space = 0;
```

```
Int words = 0;
```

After that

Also, line 22

```
printf("Average word length : %.1f", letters/words);
```

In front of 'letters', I need to add '(float)' to cast the type of print statement.

```
printf("Average word length : %.1f", (float)letters/words);
```

Output:

```
Starting program: /home/hlee152/q2
[Thread debugging using libthread_db enabled]
Using host libthread_db library "/lib64/libthread_db.so.1".
Enter a Sentence: It was deja vu all over again.
Average word length : 3.4[Inferior 1 (process 13133) exited normally]
```