

Zoe Boyle  
Lab 8  
Lab time: 5pm-5:50p

1. `cc -o q1 -g q1.c`

```
coral@coral-VirtualBox:~$ gdb q1
GNU gdb (Ubuntu 10.1-2ubuntu2) 10.1.90.20210411-git
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This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.
Type "show copying" and "show warranty" for details.
This GDB was configured as "x86_64-linux-gnu".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<https://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.

For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from q1...
```

2.

```
(gdb) list 1
1      #include <stdio.h>
2
3      int foo(int num)
4      {
5          int rev_num = 0;
6          while (num > 0)
7          {
8              rev_num = rev_num*10 + num%10;
9              num = num/10;
10         }
```

3.

4. Break 6

```
(gdb) break 6
Breakpoint 1 at 0x115b: file q1.c, line 6.
(gdb)
```

5. Run

```
(gdb) run
Starting program: /home/coral/q1

Breakpoint 1, foo (num=1125) at q1.c:6
6          while (num > 0)
(gdb)
```

```
(gdb) display rev_num
1: rev_num = 0
(gdb) display num
2: num = 1125
```

- 6.
- 7.

	1st	2nd	3rd	4th
num	112	11	1	0
rev_num	5	52	521	5211

```
(gdb) q
A debugging session is active.

    Inferior 1 [process 55138] will be killed.

Quit anyway? (y or n) y
```

- 8.
9. The function foo takes an input num, and reverses it by taking the remainder when divided by 10 and adding it to rev\_num

## Part 2

Line 6- set a value to letters; int letters = 0;

Line 7- set a value to words; int words =0;

Line 11 - changed /n to '\n'

Line 13 - space not initialized , initialized it with the other variables

Line 22- expected a float and the input was an integer; changed to (double) letters/words