Mahi Berhanu
Lab 8

**Part 1:**

4. (gdb) break 6
4. (gdb) r
6.

|  | 1st iteration | 2nd iteration | 3rd iteration | 4th iteration | 5th iteration |
|---|---|---|---|---|---|
| num | 112 | 11 | 1 | 0 | n/a |
| rev_num | 5 | 52 | 521 | 5211 | n/a |

There is no 5th iteration because num is no longer > 0

8. What the foo function does is that it reverses the input that is provided to it. We started out by 1125 and ended with 5211.

**Part 2:**
1. Line 12, line 13, and line 22
   a. Fix line 12 by adding single quotation marks around \n this means that instead of having \n it will be '\n'
   b. Fix line 13 by initializing space at the beginning so add int space; before the while loop.
   c. Fix line 22 by adding the type of the value in the printf statement. So to fix this add (float) right before letters.
   d. Correct C program:



```c
#include <stdio.h>

int main() {

        int letters;
        int words;
        int character;
        int  space;

        printf("Enter a Sentence: ");

        while((character=getchar()) != '\n') {
                if(character != ' '){
                        if(!space){
                                words++;
                                space=1;
                        }
                        letters++;
                }else
                        space = 0;
        }

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

        return 0;
}
```