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Lab Assignment #8: Post-Lab

**Part1:**

The command to set up a breakpoint at the line where “while (num > 0)” is listed is:

(gdb) break 6

The command to run the program until the first breakpoint is:

(gdb) r

The following screenshot shows the commands entered for questions 1-5:

Text

Description automatically generated

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1st Iteration | 2nd Iteration | 3rd Iteration | 4th Iteration |
| num | 112 | 11 | 1 | 0 |
| rev\_num | 5 | 52 | 521 | 5211 |

Based on the information from the chart, the foo function takes the value of the variable num and deletes the last ones place digit from the value. Then the function stacks that value onto the variable rev\_num to result in the reverse of the initial value num.

**Part2:**

Line number 11 has an error where the “\n” needs single quotes to express a character:

while ((character=getchar()) != ‘\n’){

Line numbers 13 to 15 are irrelevant as long as the variable words can be incremented by 1 on line 19.

if(character != ‘ ‘){

letters++;

}

else

words++;

Line number 19 should now look like:

words++;

Line number 22 should have a data type compatible with the floating decimal output:

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

Pseudocode for the altered program:

Text

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