

Lab 2.1

1. Problem: Program did not track line numbers of input.
2. Changes made:
 - Added new rule to count the number of lines. This rule also prints the newline, instead of just consuming it.
 - Created a new integer variable to keep track of line numbers.

Modified code:

```

%%
/* Modified by: Brianna Moffett
   Changes made:
   -added new line number variable, added rule to track line number,
   added line number as param to printf in "/" rule
   */
    int comment = 0;
    int debug=0; /* prints out debug statements if desired */
    int linenumber = 1; /*line number var*/
%%
\n    {printf("\n", linenumber++);}

"/*"    {
        if (comment) fprintf(stderr,
            " >>>>>>> line %d: Possible Nested comment
<<<<<<<<<\n",linenumber);
        comment = 1;
    }

"*/"    {
        if (!comment) printf("%s",yytext); /*print out if it is not in a
comment */
        comment = 0;
    }
.        { if (!comment) printf("%s",yytext);}

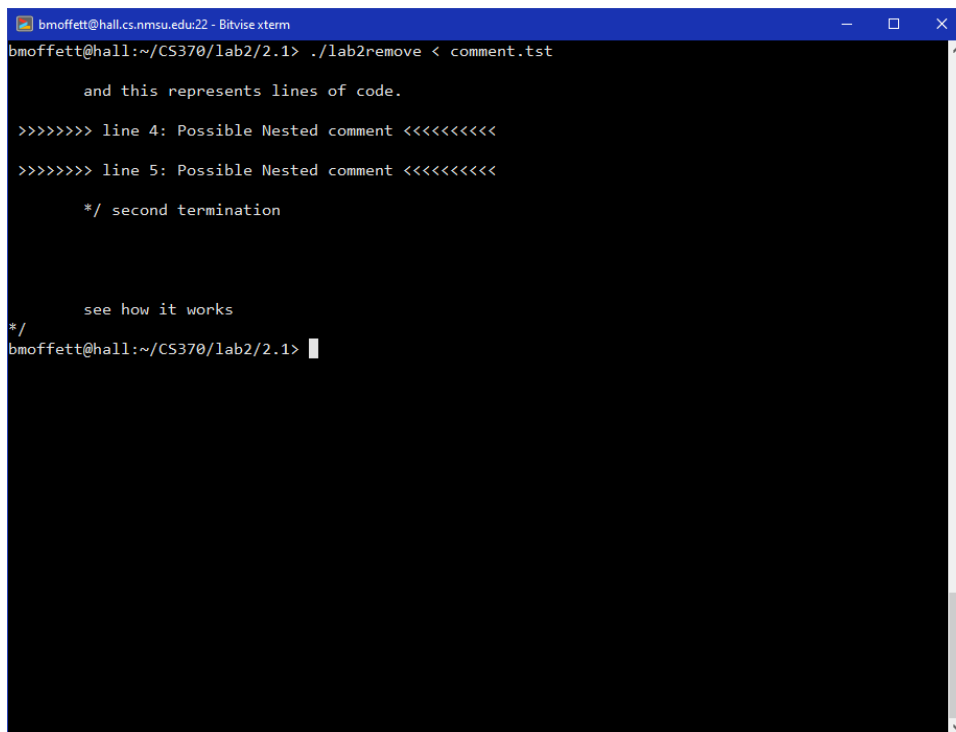
%%

```

```
int yywrap(void)
{ return 1;
}

int main()
{
    yylex();
}
```

Terminal output:

A terminal window titled "bmoффett@hall.cs.nmsu.edu:22 - Bitvise xterm" with standard window controls. The terminal shows the command `./lab2remove < comment.tst` being executed. The output consists of several lines of text, including "and this represents lines of code.", "line 4: Possible Nested comment", "line 5: Possible Nested comment", "*/ second termination", and "see how it works". The prompt `bmoффett@hall:~/CS370/lab2/2.1>` is visible at the bottom.

```
bmoффett@hall:~/CS370/lab2/2.1> ./lab2remove < comment.tst

    and this represents lines of code.

>>>>>>> line 4: Possible Nested comment <<<<<<<<<<<<
>>>>>>> line 5: Possible Nested comment <<<<<<<<<<<<

    */ second termination

    see how it works
*/
bmoффett@hall:~/CS370/lab2/2.1>
```