

24. Write a LEX program to count the number of comment lines in a given C program and eliminate them and write into another file.

PROGRAM:

```
/* Definition section */
%option noyywrap

%%
/* Rule section */
"/*"      comment_count++; begin_comment = 1;
"*/"      end_comment = 1;
\n        if (!begin_comment) ECHO;
[ \t]      if (!begin_comment) ECHO;
[a-zA-Z0-9]+ if (!begin_comment) ECHO;
.          if (!begin_comment) ECHO;
%%
/* User code section */

int comment_count = 0;
int begin_comment = 0;
int end_comment = 0;

int yywrap() {
    printf("Number of comment lines: %d\n", comment_count);
    return 1;
}

int main() {
    yyin = fopen("input.c", "r");
    yyout = fopen("output.c", "w");
    yylex();
    fclose(yyin);
    fclose(yyout);
    return 0;
}
```

INPUT:

```
C

int main() {
    /* This is a comment */
    int x = 5;
    /* This is another comment */
    return 0;
}
```

OUTPUT:

```
C

int main() {
    int x = 5;
    return 0;
}
Number of comment lines: 2
```