37. Write a LEX program to find the length of the longest word.

```
%{
#include <stdio.h>

int max_length = 0;
int current_length = 0;
%}

%%
[a-zA-Z]+       {
                current_length = yyleng;
                if (current_length > max_length) {
                   max_length = current_length;
                }
              }
.             ; /* Ignore any other characters */

%%

int main() {
   char input[4096]; // Adjust the size based on your needs
   printf("Enter a sentence:\n");

   if (fgets(input, sizeof(input), stdin) == NULL) {
      fprintf(stderr, "Error reading input.\n");
      return 1;
   }

   // Remove newline character if present
   for (int i = 0; input[i] != '\0'; i++) {
      if (input[i] == '\n') {
```

```
            input[i] = '\0';
            break;
        }
    }

    // Set the input buffer
    yy_scan_string(input);

    // Start parsing
    yylex();

    // Print the length of the longest word
    printf("Length of the longest word: %d\n", max_length);

    return 0;
}
int yywrap() { return 1; }
```