Faculty of Technology and Engineering

Computer Science and Engineering

Practical

Academic Year	:	2025-26	Semester	:	6
Course code	:	CSE312	Course name	:	Design of language processing

Practical - 4

Aim:

1. **Objective 3:** Write a program to count number of characters, word and lines from the input file.

2. **Program (Code)**

%{

#include <stdio.h>

int char_count = 0;

int word_count = 0;

int line_count = 0;

%}

%%

\n   { char_count++; line_count++; }

[\t]+   { char_count += yyleng; }

[^ \t\n]+   { word_count++; char_count += yyleng; }

%%

int yywrap() {

  return 1;

}

int main(int argc, char *argv[]) {

```c
    if (argc < 2) {
        printf("Usage: %s <input_file>\n", argv[0]);
        return 1;
    }

    FILE *file = fopen(argv[1], "r");
    if (!file) {
        printf("Error: Cannot open file %s\n", argv[1]);
        return 1;
    }

    yyin = file;
    yylex();
    fclose(file);

    printf("Characters : %d\n", char_count);
    printf("Words : %d\n", word_count);
    printf("Line : %d\n", line_count);

    return 0;
}
```

3. Output (Screen Shot)

```
 debdootmanna@Mac.mshome.net  ~  College  Sem 6 by college  DLP  4   main
 echo "The 45 is odd number." > test3_case1.txt
 debdootmanna@Mac.mshome.net  ~  College  Sem 6 by college  DLP  4   main
 ./objective3 test3_case1.txt
Characters : 22
Words : 5
Line : 1
 debdootmanna@Mac.mshome.net  ~  College  Sem 6 by college  DLP  4   main
 cat > test3_case2.txt << 'EOF'
I want to calculate a number. The number of characters, words and lines.

All know that \n is ending character of line.
45 + 89 =40
EOF
 debdootmanna@Mac.mshome.net  ~  College  Sem 6 by college  DLP  4   main
 ./objective3 test3_case2.txt
Characters : 132
Words : 26
Line : 4
```