

CC LAB 04 | Lowercase to Uppercase

Aim: LEX program for conversion of lower case to upper case and vice versa.

Implementation:

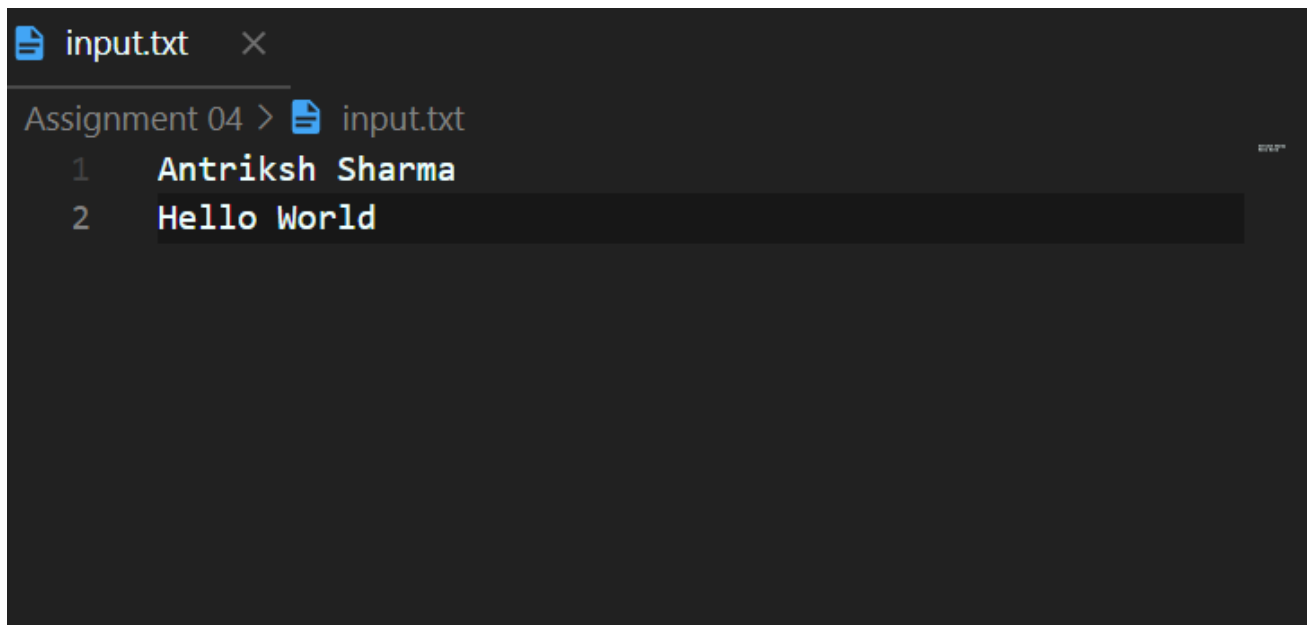
```
%option noyywrap
%{
    #include <stdio.h>
%}

lower [a-z]
upper [A-Z]

%%
{lower} { printf("%c", yytext[0]- 32);}
{upper} { printf("%c", yytext[0] + 32);}
[ \t\n] { printf("%c", yytext[0]); }
. ECHO;
%%

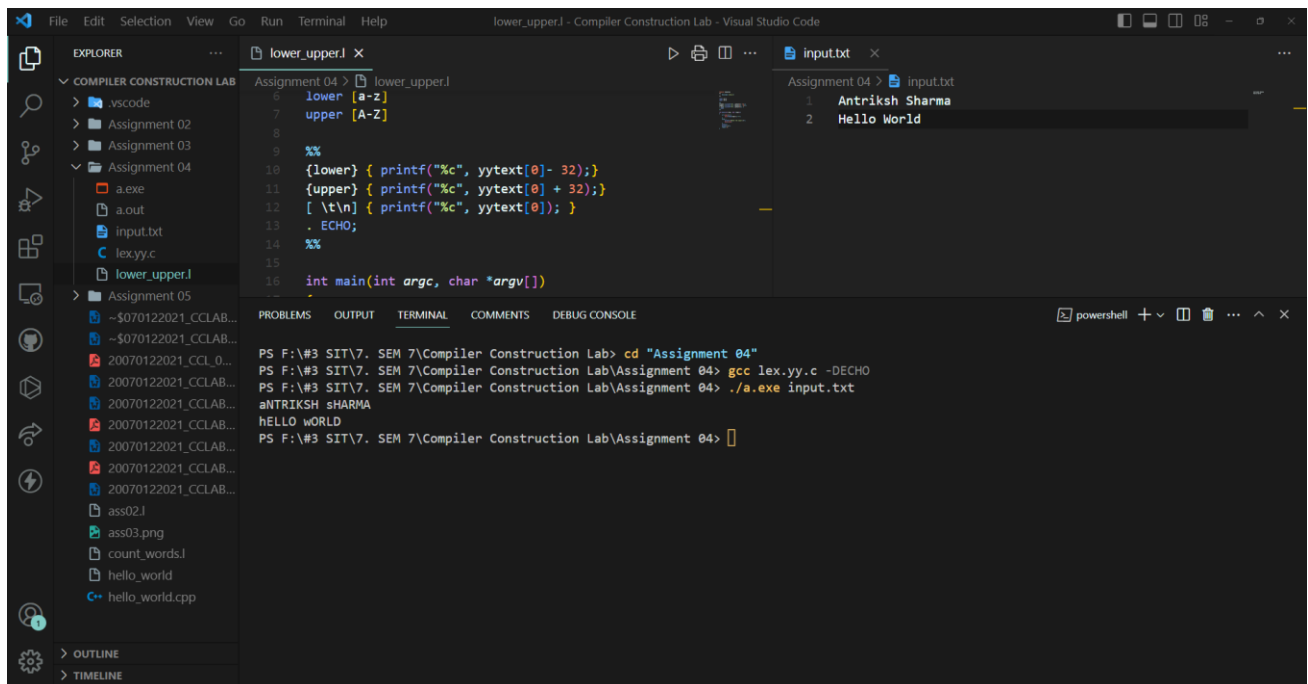
int main(int argc, char *argv[])
{
    if (argc==2) {
        yyin=fopen(argv[1], "r");
    }
    else {
        printf("\nEnter the input:\n");
        yyin=stdin;
    }
    yylex();
    printf("\n");
    return 0;
}
```

Input File:



A screenshot of a text editor window titled 'input.txt'. The editor shows two lines of text: 'Antriksh Sharma' on line 1 and 'Hello World' on line 2. The background is dark, and the text is white.

Output:



A screenshot of a Visual Studio Code window. The Explorer panel on the left shows a project structure with folders for 'COMPILER CONSTRUCTION LAB', 'Assignment 02', 'Assignment 03', and 'Assignment 04'. The 'Assignment 04' folder is expanded, showing files 'a.exe', 'a.out', 'input.txt', 'lex.yy.c', and 'lower_upper.l'. The 'lower_upper.l' file is open in the editor, showing a Lex specification and a C main function. The Terminal panel at the bottom shows the output of the program, which is 'aNTRIKSH sHARMA' and 'HELLO wORLD'. The command prompt shows the directory 'Assignment 04' and the execution of 'gcc lex.yy.c -DECHO' and './a.exe input.txt'.