Department of Computer Science and Engineering

National Institute of Technology, Rourkela

Course Code: CS3075 **Course Name:** Compiler Design Laboratory

Date: 23-08-2024

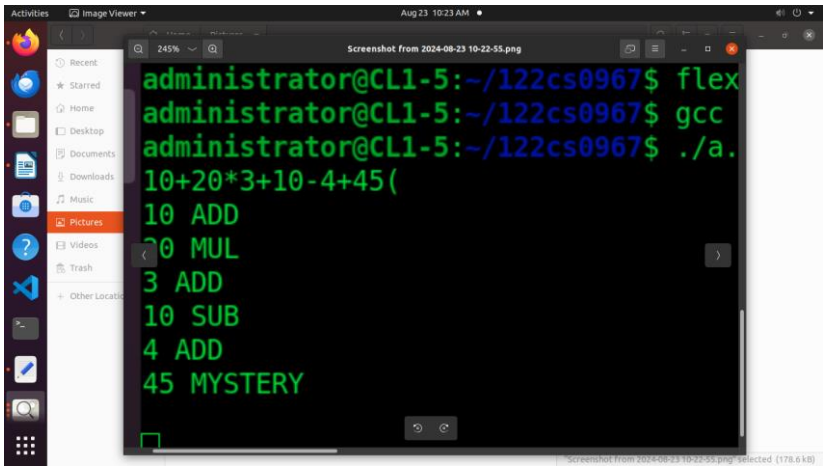
Assignment No.:5

Roll No.: 122CS0967 **Name:RITESH CHAURASIYA**

QUESTION 1

WRITE A FLEX CODE TO PRINT THE TOKENS.

```
/* just like Unix wc */
%{
#include<stdio.h>
%}
%%
[0-9]+   {printf("%d ",atoi(yytext));}
"+"      {printf("ADD \n");}
"-"      {printf("SUB \n");}
"*"      {printf("MUL \n");}
"/"      {printf("DIV \n");}
"|"      {printf("ABS \n");}
"("      {printf("MYSTERY \n");}
")"      {printf("MYSTERY \n");}
%%
int main(int argc, char **argv
{
yylex();
return 0;
}
int yywrap(){
return 1;
}
```



QUESTION 2

WRITE A FLEX CODE TO PRINT TOKENS USING ENUMERATIONS

CODE

```
/* just like Unix wc */
%{
#include<stdio.h>
enum{NUMBER =258,ADD,SUB,MUL,DIV,ABS,EOL};
%}
%%
[0-9]+   {printf("%d  enum %d \n",atoi(yytext),NUMBER );}
"+"      {printf("ADD enum %d \n",ADD);}
"-"      {printf("SUB enum %d \n",SUB);}
"*"      {printf("MUL enum %d \n",MUL);}
"/"      {printf("DIV enum %d \n",DIV);}
"|"      {printf("ABS enum %d \n",ABS);}
"\n"     {printf("EOL enum %d \n",EOL);}
" "      {printf("SPACE  \n");}
%%
int main(int argc, char **argv)
{
yylex();
return 0;
}
int yywrap(){
return 1;
}
```