**System Software and Compiler Design**

**Lab Assignment 7**

**Name:** Tushar Mittal

**PRN:** 1032200956

**Roll No:** PB68

**Panel:** B

**Batch:** B2

**Code:**

calc.l

%{

#include "y.tab.h"

extern int yylval;

%}

%%

[0-9]+ { yylval = atoi(yytext); return NUMBER; }

\n { return EOL; }

. { return yytext[0]; }

%%

calc.y

%{

#include <stdio.h>

extern int yylex();

%}

%token NUMBER EOL

%left '-' '+'

%left '\*' '/'

%%

calc: /\* empty string \*/

| calc line

;

line: EOL

| exp EOL { printf("%d\n", $1); }

;

exp: NUMBER

| exp '+' exp { $$ = $1 + $3; }

| exp '-' exp { $$ = $1 - $3; }

| exp '\*' exp { $$ = $1 \* $3; }

| exp '/' exp { $$ = $1 / $3; }

| '(' exp ')' { $$ = $2; }

;

%%

int main(void) {

yyparse();

}

int yyerror(char \*s) {

fprintf(stderr, "error: %s\n", s);

}

**Input:**

1. 2+3\*4
2. (2+3)\*4

**Output:**

1. 14
2. 20

A screen shot of a computer

Description automatically generated