

Practical-8

AIM : Write a program to convert infix to postfix using lex and YACC.

❖ CODE :

1. Pr8_CD.l

```
% {
#include "y.tab.h"
extern int yylval;
% }
%%
[0-9]+ {yylval=atoi(yytext); return NUM;}
\n    return 0;
.      return *yytext;
%%

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

2. Pr8_CD.y

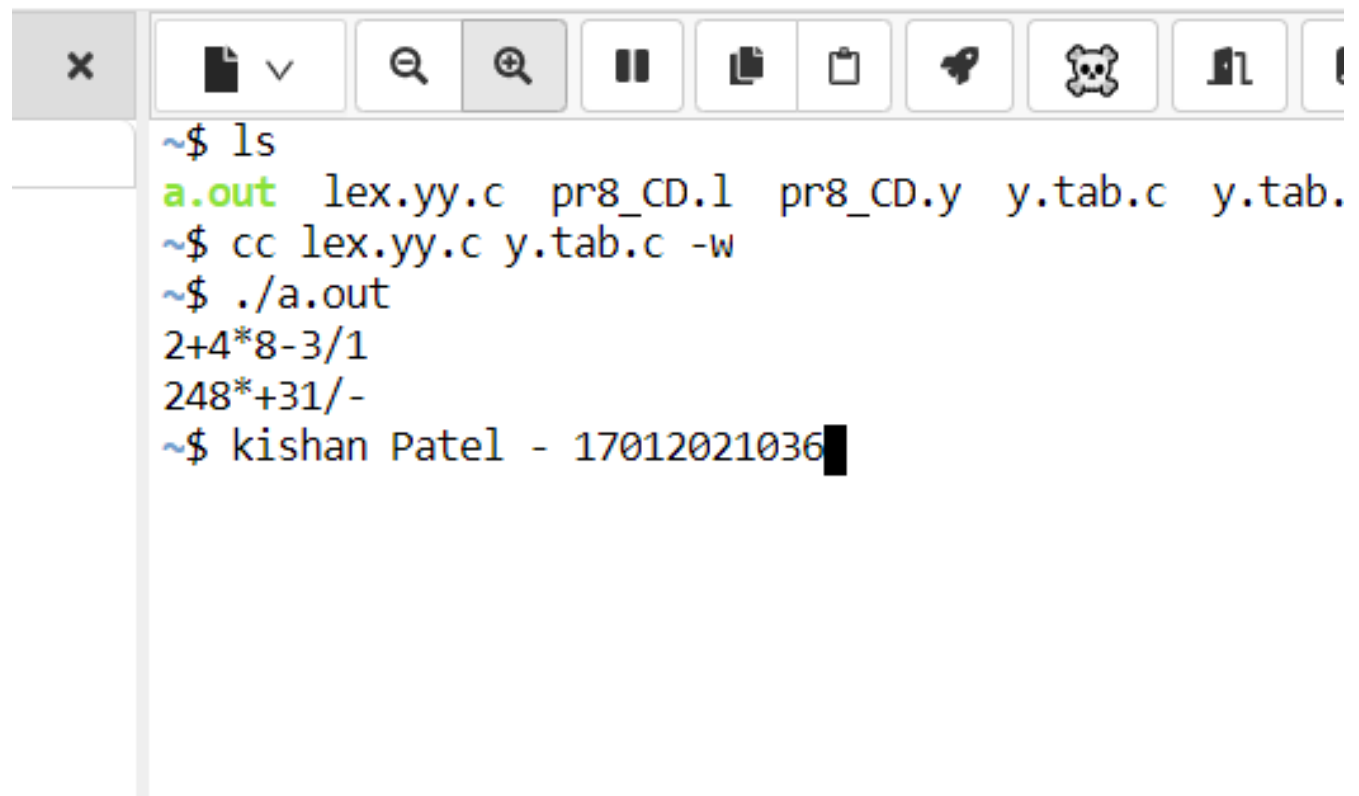
```
% {
#include <stdio.h>
% }
%token NUM
%left '+' '-'
%left '*' '/'
%right NEGATIVE
%%
S: E {printf("\n");}
;
E: E '+' E {printf("+");}
  | E '*' E {printf("*");}
  | E '-' E {printf("-");}
  | E '/' E {printf("/");}
  | '(' E ')'
  | '-' E %prec NEGATIVE {printf("-");}
  | NUM {printf("%d", yylval);}
;
```

%%

```
int main(){  
    yyparse();  
}
```

```
int yyerror (char *msg) {  
    return printf ("error YACC: %s\n", msg);  
}
```

❖ OUTPUT



```
~$ ls  
a.out  lex.yy.c  pr8_CD.1  pr8_CD.y  y.tab.c  y.tab.  
~$ cc lex.yy.c y.tab.c -w  
~$ ./a.out  
2+4*8-3/1  
248*+31/-  
~$ kishan Patel - 17012021036
```