

```

%{
    /* Definition section */
#include<stdio.h>
}%

%token NUMBER ID
// setting the precedence
// and associativity of operators
%left '+' '-'
%left '*' '/'

/* Rule Section */
%%
E : T { printf("Result = %d\n", $$); return 0; }

T : T '+' T { $$ = $1 + $3; }
  | T '-' T { $$ = $1 - $3; }
  | T '*' T { $$ = $1 * $3; }
  | T '/' T { $$ = $1 / $3; }
  | NUMBER { $$ = $1; }

%%

int main()
{
    printf("Enter the expression\n");
    yyparse();
}

/* For printing error messages */
int yyerror(char* s)
{
    printf("\nExpression is invalid\n");
}

```

Save yellow highlighted code with filename.y extension. Example calc.y

LEX Code

```

%{
    /* Definition section */
#include "y.tab.h"
extern yylval;
}%

%%
[0-9]+ { yylval = atoi(yytext); return NUMBER; }
[a-zA-Z]+ { return ID; }
[\t]+ ;
\n { return 0; }

```

```
, { return yytext[0]; }  
%%
```

Save green highlighted code with filename.y extension. Example calc.l

Note: file name of both lex and yacc should be same, only extension will change .

Example **calc.y** for yacc file and **calc.l** for lex file