PARSER EXAMPLE 2

MakefileLE

```
flex scanner.l
bison -d parser.y
gcc -o parser lex.yy.c parser.tab.c -lfl.
```

SCANNER.L

```
%{
#include "parser.tab.h"
int lineno = 0;
%}

%%

[ \t]              { /* eat white spaces */ }
[a-z A-Z] [a-z A-Z]*    { return ID; }
[0-9][0-9]*             { return NUMBER; }
[+-]                    { return OP; }
\n                      { ++lineno; return '\n'; }
.              { printf ("line no %d: unrecognized character '%c'\n"
                 , lineno, yytext[0]); }
```

ex String operations on yyerror can be reduced to variable access instructions.

PARSER.y

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


%%


Goal: Expr '\n'


Expr: Expr OP Term
    | Term
    ;


Term: NUMBER | ID,


%.%.


yyerror (char *s) {
    fprintf (stderr, "error: %s \n", s);
}


main (int argc, char *argv) {
    yyparse ();
    printf ("Parsing Over \n");
}
```