**LEX.Y:**

**%{**

**#include <stdio.h>**

**#include <stdlib.h>**

**#include <pthread.h>**

**#include <unistd.h>**

**void \* scanner;**

**FILE \*f, \*t;**

**#define YYSTYPE int**

**%}**

**%pure-parser**

**%lex-param {void \* scanner}**

**%parse-param {void \* scanner}**

**%start list**

**%token NUMBER**

**%left '+' '-'**

**%left '\*' '/' '%'**

**%left UMINUS**

**%union {int i;}**

**%%**

**list:**

**|**

**list stat '\n'**

**|**

**list error '\n'{ yyerrok; }**

**;**

**stat: expr { printf("%d\n",$1);}**

**;**

**expr: '(' expr ')'{ $$ = $2; }**

**|**

**expr '\*' expr { $$ = $1 \* $3; }**

**|**

**expr '/' expr { $$ = $1 / $3; }**

**|**

**expr '+' expr { $$ = $1 + $3; }**

**|**

**expr '-' expr { $$ = $1 - $3; }**

**|**

**'-' expr %prec UMINUS { $$ = -$2; }**

**|**

**NUMBER**

**;**

**%%**

**void\* scanfunc(void \* cnt)**

**{**

**t=fopen("temp.txt","r");**

**yylex\_init(&scanner);**

**yyset\_in(t,scanner);**

**yyparse(scanner);**

**yylex\_destroy(scanner);**

**fclose(t);**

**}**

**main(int argc, char \*argv[])**

**{**

**if(argc!=2)**

**{**

**printf("Incorrect parameters!\n");**

**return -1;**

**}**

**f=fopen(argv[1],"r");**

**if(!f)**

**{**

**printf("File cannot be opened!\n");**

**return -1;**

**}**

**pthread\_t threads[10];**

**int cnt=0,j=0;**

**size\_t n=100;**

**char \*s=malloc(n);**

**while(!feof(f))**

**{**

**getline(&s,&n,f);**

**t=fopen("temp.txt","w+");**

**fprintf(t, "%s", s);**

**fclose(t);**

**pthread\_create(&threads[cnt], NULL, scanfunc, NULL);**

**sleep(1);**

**cnt++;**

**}**

**for(j=0;j<cnt;j++)**

**pthread\_join(threads[j],NULL);**

**}**

**yyerror()**

**{**

**printf("Error!\n");**

**}**

**yywrap()**

**{**

**return(1);**

**}**

**LEX.L:**

**%{**

**#include <stdio.h>**

**#include "y.tab.h"**

**extern int scanner;**

**%}**

**%option reentrant bison-bridge**

**NUMBER [0-9]+**

**%%**

**" " ;**

**{NUMBER} {**

**yylval->i = atoi(yytext);**

**return(NUMBER);**

**}**

**[^0-9\b] {**

**return(yytext[0]);**

**}**

**%%**

**LEX.TXT:**

**(1+2)\*3/3-8**

**65-8**

**1+4**

**(6+4)/3**

**OUTPUT:**

**[root@localhost ~]# cd PCDP/**

**[root@localhost PCDP]# yacc -d lex.y**

**[root@localhost PCDP]# lex lex.l**

**[root@localhost PCDP]# gcc y.tab.c lex.yy.c -lpthread**

**[root@localhost PCDP]# ./a.out lex.txt**

**-5**

**57**

**5**

**3**

**[root@localhost PCDP]#**