6b. Write YACC program to recognize valid identifier, operators and keywords in the given text (C program) file.

|  |
| --- |
| Lex |
| %{  #include<stdio.h>  #include "y.tab.h"  extern int yylval;  %}  %%  [\t] ;  [+|-|\*|/|=|<|>] {printf("operator is %s\n",yytext);return OP;}  [0-9]+ {yylval=atoi(yytext);printf("number is %d\n",yylval);return DIGIT;}  int|char|bool|float|void|for|while|if {printf("keyword is %s\n",yytext);return KEY;}  [a-zA-Z0-9]+ {printf("Identifier is %s\n",yytext);return ID;}  . ;  %% |

|  |
| --- |
| yacc |
| %{  #include<stdio.h>  #include<stdlib.h>  int id=0,dig=0,key=0,op=0;  %}  %token ID,DIGIT,KEY,OP  %%  input:  DIGIT input{dig++;}  | ID input{id++;}  | KEY input{key++;}  | OP input {op++;}  | DIGIT {dig++;}  | ID {id++;}  | KEY {key++;}  | OP {op++;}  %%  extern FILE \*yyin;  main(int argc, char \*argv[])  {  yyin=fopen(argv[1],"r");  yyparse();  printf("digit=%d\n,id=%d\n,key=%d\n,op=%d\n",dig,id,key,op);  }  yyerror()  {  printf("error\n");  exit(0);  } |

**$ lex 6b.l**

**$yacc 6b.y –d**

**$cc lex.yy.c y.tab.c –ll**

**%./a.out input.c**