```
%{
/* need this for the call to atof() below */
#include <math.h>
#include <stdio.h>
#include <stdlib.h>
%}

DIGIT [0-9]
ID [a-z][a-z0-9]*

%%
{DIGIT}+ {printf(" An integer: %s (%d)\n", yytext, atoi(yytext));}
{DIGIT}+"."{DIGIT}+ {printf(" A float: %s (%g)\n", yytext, atof(yytext));}
int|main|return|if|then|begin|end|procedure|function {printf(" A keyword: %s\n", yytext);}
{ID} {printf(" An identifier: %s\n", yytext);}
"+"|"-"|"*"|"/" {printf(" An operator: %s\n", yytext);}
"["[^\]]*"]" { /* eat up one-line comments */ }
[ \t\n]+ { /* eat up whitespace */ }
[;(),{}] {printf(" Special symbol: %s\n", yytext);}
. {printf("Unrecognized character: %s\n", yytext);}
%%

int yywrap() {
    return 1; /* Return 1 to indicate no more input is available */
}

int main(int argc, char **argv) {
    FILE *fp;
    char filename[50];

    printf("Enter the filename: \n");
    scanf("%s", filename);

    fp = fopen(filename, "r");
    if (fp == NULL) {
        fprintf(stderr, "Error: Cannot open file '%s'\n", filename);
        return 1;
    }

    yyin = fp;
    yylex();
    fclose(fp);

    return 0;
}
```

INPUT.TXT

```
int main(){
int a,b,c;
a=5;
b=6;
c=a+b;
return 0;
}
```