

```

1  %{
2      #include<stdio.h>
3      #include<string.h>
4      #include<stdlib.h>
5      #include<math.h>
6      #include "1307006.tab.h"
7  %}
8
9  alpha [a-zA-Z]
10 digit [0-9]
11 header "import"[ ]*+[^\\n]+[.h][ ]*
12 keyWord IF|ELSE|FOR|RETURN|INTEGER|FLOAT|CHAR|
13 SWITCH|CASE|BREAK|DEFAULT|PF
14 singleLineComment [ ]*#[#][a-zA-Z0-9_+-.:~\|?><
15 ]*
16 multipleLineComment [ ]*#![#][a-zA-Z0-9_+-.:~\|?><\\n\\
17 t ]*#[![ ]
18 %%
19 {digit}+ { yylval = atoi(yytext); return NUM; }
20 {alpha} { yylval = *yytext - 'a'; return VAR; }
21 SWITCH { return SWITCH; }
22 PF { return PF; }
23 CASE { return CASE; }
24 IF { return IF; }
25 ELSE { return ELSE; }
26 BREAK { return BREAK; }
27 DEFAULT { return DEFAULT; }
28 " {" { return START; }
29 " {" { return END; }
30 FOR { return FOR; }
31 SIN { return SIN; }
32 COS { return COS; }
33 TAN { return TAN; }
34 LOG { return LOG; }
35 LOG10 { return LOG10; }
36 BIGMOD { return BIGMOD; }
37
38 {singleLineComment} {}
39 {multipleLineComment} {}
40 {header} {}
41 [-+/*<=>,(,):;%^] {yylval = yytext[0]; return *yytext; }
42 INTEGER {return INT;}
43 CHAR {return CHAR;}
44 FLOAT {return FLOAT;}
45 "main" { return MAIN; }
46 [ ]* {}
47 [\\n]* {}
48 [\\t]* {}
49 . {printf("%s --> invalid\\n",yytext);}
50
51
52 %%
53 int yywrap()
54 {
55     return 1;
56 }
57
58 int main()
59 {
60     freopen("input.txt","r",stdin);
61     yyparse();
62     //freopen("out2.txt","w",stdout);
63     return 0;

```

