

```

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

%%

[\\t\\n ]+      {}

if
double
int
do
cout
return
case
switch
then
include {
    fprintf(yyout, "%s --> KEYWORD\\n", yytext);
}

[0-9]+ {
    fprintf(yyout, "%s --> INTEGER\\n", yytext);
}

[0-9]+ "." [0-9]* {
    fprintf(yyout, "%s --> FLOATING POINT\\n", yytext);
}

[a-zA-Z][a-zA-Z0-9]* {
    fprintf(yyout, "%s --> IDENTIFIER\\n", yytext);
}

"+"
"_"
"*"
"/" {
    fprintf(yyout, "%s --> OPERATOR\\n", yytext);
}

"//" [a-zA-Z0-9' '\\t]* {
    fprintf(yyout, "%s --> COMMENT\\n", yytext);
}

"/*" [a-zA-Z0-9' '\\t\\n]* "*" "/" {
    fprintf(yyout, "%s --> COMMENT\\n", yytext);
}

. {}

%%

int main()
{
    char in_file_name[100];
    printf("Enter the input file name : ");
    scanf("%123s", in_file_name);

    extern FILE *yyin;
    extern FILE *yyout;

    yyin = fopen(in_file_name, "r");

```

```
    if(yyin == NULL)
        printf("\nError!!!\nCan't open the file.\n");

    yyout = fopen("output_file.cpp", "w");

    yylex();

    fclose(yyin);
    fclose(yyout);

    return 0;
}
```