

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

```
id [a-zA-Z][a-zA-Z0-9]*
```

```
%%
```

```
"auto" |  
"int" |  
"const" |  
"short" |  
"struct" |  
"unsigned" |  
"break" |  
"continue" |  
"long" |  
"signed" |  
"void" |  
"default" |  
"register" |  
"sizeof" |  
"typedef" |  
"volatile" |  
"static" |  
"union" |  
"extern" |  
"float" |  
"double" |  
"char" |  
"do" |  
"while" |  
"if" |  
"else" |  
"switch" |  
"case" |  
"return" {printf("\n %s is a Keyword",yytext);}
```

```
"+" |
```

```
"-" |
```

```
"*" |
```

```
"/" {printf("\n %s is a Arithmetic operator",yytext);}
```

```
"++" |
```

```
--" {printf("\n %s is a Binary operator",yytext);}
```

```
"=" |
```

```
"+=" |
```

```
"-=" |
```

```
"*=" |
```

```
"/=" |
```

```
"%=" {printf("\n %s is a Assignment operator",yytext);}
```

```
"==" |
```

```
">" |
```

```
"<" |
```

```
"!=" |
```

```
">=" |
```

```
"<=" {printf("\n %s is a Relational operator",yytext);}
```

```
"&&" |
```

```
"!" |
```

```
"||" {printf("\n %s is a Logical operator",yytext);}
```

```
"&" |
```

```
"|" |
```

```
"^" |
```

```
"~" |
```

<<" |>>" {printf("\n %s is a Bitwise operator",yytext);}

```
":" |
```

```
"," |
```

```
;" |
```

```
"{" |
```

```
"}" |
```

```
"[" |
```

```
"]" |
```

```
." {printf("\n %s is a special symbol",yytext);}
```

```
(id)([0-9]*) {printf("\n %s is an identifier",yytext);}
```

```
[0-9]* {printf("\n %s is a number",yytext);}
```

```
{id}\( {printf("\n %s is a function",yytext);}
```

```
#.* {printf("\n %s is a preprocessor",yytext);}
```

```
"//".* {printf("\n %s is a single line comment",yytext);}
```

```
"/*"(.|\n)*"*/" {printf("\n %s is a multiline comment",yytext);}
```

```
%%
```

```
int main()
```

```
{
```

```
FILE *fp;
```

```
fp=fopen("input.c","r");
```

```
if(!fp)
```

```
{
```

```
printf("can't open file");
```

```
}
```

```
yyin=fp;
```

```
yylex();
```

```
return 0;
```

```
}
```

```
int yywrap()
```

```
{
```

```
return 1;
```

```
}
```