

PROGRAM:

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

%}

%%

int|char|float|return { printf("\n%s=> Keywords",yytext);}

#.* { printf("\n%s=>Preprocessor Directive",yytext);}

printf|scanf|main { printf("\n%s=>functions",yytext);}

"[a-z]+[" { printf("\n%s=>Strings",yytext);}

[[a-z][A-Z]][[a-z][A-Z][0-9]]+ { printf("\n%s=>Identifiers",yytext);}

[0-9] { printf("\n%s=>Numbers",yytext);}

"+"|"-"|"*"|"/"|"%" { printf("\n%s=>Operators",yytext);}

", "|" ";" "&" "(" ")" "[" "]" "{" "}" { printf("\n%s=>Special Characters",yytext);}

%%

int main()
{
FILE *fp;
fp=fopen("input.txt","r");
yyin=fp;
yylex();
return 0;
}

int yywrap()
{
return 1;
}
```

input.txt:

```
int main()
{
int a,b;
printf("hello");
float c;
char d;
return 0;
}
```