```
%{
   #include<stdio.h>
   int a,b;
%}
letter [A-Za-z]
digit [0-9]
keyword if|else|do|while|int
identifier {letter}({letter}|{digit})*
relational_op "<"|">"|"<="|">="|"<>"
arithmetic_op "+"|"-"|"*"|"/"
single line comment "//".*
multi line comment "/*".*"*/"
%%
{keyword} {printf("Keyword %s is found",yytext);}
{identifier} {printf("Identifier %s is found",yytext);}
{letter} {printf("Letter %s is found",yytext);}
{digit} {printf("Digit %s is found",yytext);}
{relational_op} {printf("Relational operator %s is found",yytext);}
{arithmetic_op} {printf("Arithmetic operator %s is found",yytext);}
{single_line_comment} {printf("Single line comment is found");}
{multi_line_comment} {printf("Multi line comment is found");}
%%
```



```
int main()
{
 yylex();
}
int yywrap()
 return 1;
}
#include <stdio.h>
int main() {
  int num1, num2, sum;
  printf("Enter two integers: ");
  scanf("%d %d", &num1, &num2);
  // calculating sum
  sum = num1 + num2;
  printf("%d + %d = %d", num1, num2, sum);
  return 0;
}
```

student@student-Veriton-M200-H61:~\$ lex rn12.l student@student-Veriton-M200-H61:~\$ cc lex.yy.c student@student-Veriton-M200-H61:~\$ ./a.out <rn12.c Punctuation mark # is found



Identifier include is found
Relational operator < is found
Identifier stdio is found
Identifier h is found
Relational operator > is found

Keyword int is found

Keyword main is found

Punctuation mark ( is found

Punctuation mark ) is found

Punctuation mark { is found

Keyword int is found

Identifier num1 is found

Punctuation mark, is found

Identifier num2 is found

Punctuation mark, is found

Identifier sum is found

Punctuation mark; is found

Identifier printf is found

Punctuation mark ( is found

Literal "Enter two integers: " is found



Punctuation mark ) is found

Punctuation mark; is found

Identifier scanf is found

Punctuation mark (is found

Literal "%d %d" is found

Punctuation mark, is found

&Identifier num1 is found

Punctuation mark, is found

&Identifier num2 is found

Punctuation mark ) is found

Punctuation mark; is found

Single line comment // calculating sum is found

Identifier sum is found

= Identifier num1 is found

Arithmetic operator + is found

Identifier num2 is found

Punctuation mark; is found

Identifier printf is found

Punctuation mark (is found



Literal "%d + %d = %d" is found

Punctuation mark, is found

Identifier num1 is found

Punctuation mark, is found

Identifier num2 is found

Punctuation mark, is found

Identifier sum is found

Punctuation mark ) is found

Punctuation mark; is found

Keyword return is found

Number 0 is found

Punctuation mark; is found

Punctuation mark } is found

