

QUES-09: Write a lex program to make a FA which display integer and float number type.

CODE:

```
%s A B C
%%
<INITIAL>[0-9] BEGIN A;
<INITIAL>\n {printf("Not Accepted\n");}
<A>[0-9] BEGIN A;
<A>\. BEGIN B;
<A>\n {printf("Integer \n"); BEGIN INITIAL;}
<B>[0-9] BEGIN C;
<C>[0-9] BEGIN C;
<C>\n {printf("Float\n"); BEGIN INITIAL;}
. ;
%%
int main(){
    printf("Enter num : ");
    yylex();
    return 0;
}
int yywrap(){
    return 1;
}
```

TERMINAL:

```
samadimam@SamadImam2005:~/CompilerDesign$ lex 10_FA_int_float.l
samadimam@SamadImam2005:~/CompilerDesign$ gcc lex.yy.c
samadimam@SamadImam2005:~/CompilerDesign$ ./a.out
Enter num : 552
Integer
1.3
Float
38
Integer
0.92
Float
```

SIGNATURE