Lab Practice Session # 2

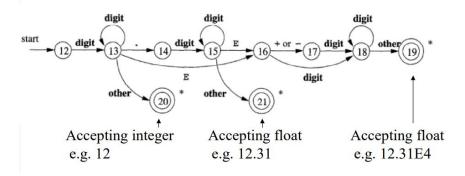
Course Title: Compiler Construction Lab (CSTE-4106)

1. Write a C program to handle errors in lexical analysis phase (See Lecture-3 for more examples)

```
Sample Input/Output
```

```
Enter a code:
int main()
{
         printf("HI"); $
         Return 0;
}
Output: Lexical error!
```

2. Write a C program that accept integer and floating-point numbers with exponentiation.



Sample Input/Output

Enter a number: 12

Accepted!!

Enter a number: 12.31E4

Accepted!!

Enter a number: 15.4E

Rejected!!

3. Write a C program to find epsilon closure of an NFA.

Sample Input/Output

| Input: | Output: |
|--------|----------------------------------|
| A 1 A | No of states: 3 |
| A 0 B | States are: |
| A e B | A |
| B 0 C | В |
| B e C | C |
| | Epsilon closure (A)= $\{A B C\}$ |
| | Epsilon closure $(B) = \{B C\}$ |
| | Epsilon closure $(C) = \{C\}$ |

Assignment on Lexical Analysis:

- 4. Write a C program to perform symbol table management in a compiler.
- 5. Write a C program to find a DFA from an epsilon-NFA.