**PRACTICAL # 01**

**OBJECT:**

Designing DFA for integer number tokens recognition.

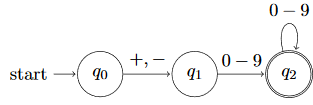
**THEORY:**

Compiler construction deals with the design and implementation of translator for a programming language. A compiler design is organized in phases. We will deal with the compiler front-end. This lab discusses the first phase of compiler, that is lexical analyzer.

**Program:**

This DFA below recognizes the pattern of integer numbers.

Regular Expression (0-9)(0-9)\*



**ACTIVITIES**

**Activity 1**

Install and setup Visual Studio IDE for compiler construction activities in C#.

**Activity 2**

Write a program in C# that recognizes and outputs numbers from the code “int 234=dsf, 43,54a;”.

**REVIEW QUESTIONS**

1. What is lexical analyzer?
2. What is a token?
3. How do you define pattern for integer tokens?