

# Ahsanullah University of Science and Technology

Department of Computer Science and Engineering

Examination: Online 3

Session: Fall 2022

Year/Semester: 4/1

Course No: CSE4130

Course Title: Formal Languages and Compilers Lab

Mark: 10

Time: 20 Minutes.

## Set B

Suppose, a symbol table has been generated for a given C program and stored as a text file, named “symbolTable.txt” ([SI no] [ID Name] [ID Type] [ID Scope]) and the file is given as input. Your job is to write a program that will be able to manipulate the Symbol Table to Insert a new variable at a given scope and display the updated symbol table.

**\*\*variables of the local scopes will be together in this case.**

*Say, the content of the “symbolTable.txt” file is:*

```
1      x1      var   global
2      f1      func  global
3      x       var   f1
4      z       var   f1
5      main    func  global
6      n1      var   f1
```

Sample Input	Sample Output
Insert Data: test f1	The updated Symbol Table:  1      x1      var   global 2      f1      func  global 3      x       var   f1 4      z       var   f1 5      test    var   f1 6      main    func  global 7      n1      var   main