

# Assignment 1

## CS 348 Introduction to Programming Languages Laboratory

Name: Pooja Gajendra Bhagat

Roll Number: 180101057

*2 pass assembler*

Environment used to run the program :

gcc version 9.3.0 (Ubuntu 9.3.0-17ubuntu1~20.04)

Command to compile:

g++ 180101057\_Assign01.cpp

Command to run the code:

./a.out program.txt

### File description

1. 180101057\_Assign01.cpp : Contains code for file handling, loads optable and calls pass\_one and pass\_two
2. assembler.h : Contains function prototypes, header files and global variable
3. assembler.cpp : Contains funtion definition of some functions declared in assembler.h
4. pass\_one.cpp : Contains code for pass 1 of the assembler. It reads input program and creates intermediate file
5. pass\_two.cpp : Contains code for pass 1 of the assembler. It reads input program and creates object code and listing file
6. opcodeTable.txt : Contains object code for corresponding operations
7. program.txt : Contains input assembly code
8. codeListing.txt : Contains assembly listing
9. symbolTable.txt : Contains symbols in assembly code and their corresponding addresses
10. intermediate.txt : Intermediate file created after pass 1.
11. objectCode.txt : Contains the resultant object code