# Laboratory 6

Title of the Laboratory Exercise: Sorting

1. Introduction and Purpose of Experiment

Students will create assembly code with sorting techniques and nested loops

1. Aim and Objectives

Aim

To develop assembly language program to perform sorting using nested loop structures

Objectives

At the end of this lab, the student will be able to

* + use nested loops in assembly
  + perform sorting in ascending/ descending order
  + Build complex looping logic in assembly language

1. Experimental Procedure

1. Write algorithm to solve the given problem

2. Translate the algorithm to assembly language code

3. Run the assembly code in GNU assembler

4. Create laboratory report documenting the work

1. Questions

Develop an assembly language program to perform the following

1. To design calculator to perform all arithmetic operations based on input given by user.
2. To perform SWAP operation using Logical instructions
3. To compute factorial of a number.
4. To find second smallest number in an unsorted array.
5. Calculations/Computations/Algorithms
6. Presentation of Results
7. Analysis and Discussions
8. Conclusions
9. Comments
10. Limitations of Experiments
11. Limitations of Results
12. Learning happened
13. Recommendations

Signature and date