# Laboratory 5

Title of the Laboratory Exercise: Searching an element in an array

1. Introduction and Purpose of Experiment

Students will be able to perform search operations in an array of integers or characters

1. Aim and Objectives

Aim

To develop assembly language program to perform search operations in an array

Objectives

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

* + Identify instructions to be used in assembly language
  + Perform search operations 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 a laboratory report documenting the work

1. Questions

Develop an assembly language program to perform the following:

1. Searching an element in an array of ‘n’ numbers
2. Read a sentence with at least one special character and search for the special character and print it. E.g., consider the input {youremailid@msruas.ac.in }

Output: @, .

1. Develop an assembly language program to compute the parity of a hexadecimal number stored in the Register1. If Register1 has odd number of ones, update Register2 with 0x01. If Register1 has even number of ones, update Register2 with 0x00.

Note: Register1 and Register2 can be any General Purpose Registers.

1. Calculations/Computations/Algorithms

1. Presentation of Results

1. Analysis and Discussions
2. Conclusions
3. Comments

1. Limitations of Experiments

2. Limitations of Results

3. Learning happened

4. Recommendations

Signature and date Marks