## **Laboratory Exercise 4: Selection Sort**

## Introduction

A general approach when we would manually sort items, is selection sort it is accomplished by:

- Finding the smallest (or largest) item on a list
- Exchange this item with the top item of the unsorted part
- · Repeat until all items are sorted

```
{5,3,2,8,1} // 1 smallest
{1,3,2,8,5} // 2 smallest excluding 1
{1,2,3,8,5} // 3 smallest excluding 1,2
{1,2,3,8,5} // 5 smallest excluding 1,2,3
{1,2,3,5,8} // list sorted
```

## **Learning Outcomes:**

- Implement an assembly code to implement get the minimum item on a list
- Use the function of getting the minimum to implement selection sort.

## Problem Background:

Declare an array of 15 *bytes* on the data segment and initialize it with any value byte sized value. Name this as array.

Implement a procedure named getMin to get the minimum value on array.

Call the procedure getMin on procedure selectionSort to sort array in ascending order