# Data Structures CS 246 - 040 Quiz 05 Solutions

a. The ascending order sorting algorithm that finds the minimum value of the unsorted portion of a collection and places it at the end of the sorted portion is called

# **Solution:**

a selection sort

b. The ascending order sorting algorithm that swaps adjacent elements of the unsorted portion of a collection until the maximum value is moved to the beginning of the sorted portion is called

## **Solution:**

a bubble sort

c. The ascending order sorting algorithm that swaps adjacent elements of the sorted portion of a collection until the element is in the correct position of the sorted portion is called

#### **Solution:**

a insertion sort

d. The stack data structure follows the principle \_\_\_\_\_\_, which is abbreviated \_\_\_\_\_.

#### Solution:

first in last out; FIFO

e. Provide the typical names of the methods of a stack.

### **Solution:**

push(), pop(), top(), isempty()