

## LAB QUESTION

A survey done at Chimwaga Pre and Primary School at Dodoma revealed that the lower limit of the age to join primary schools dropped by 2 years as compared to the survey done in last five years. A sample of ten pupils was used in a survey, where the surveys revealed that the youngest student aged 4 years and the eldest student aged 6 years. In the survey; surname, registration number, age, weight, and height were the information that was recorded.

Write a program that can manipulate data of the student in a class. The surveyor should be enabled to increase or reduce the sample size of the study in refining or testing the study result.

- a. Use the following concept to enter and display data on computer:
  - i. Structure
  - ii. Linked List
  - iii. Queue
  - iv. Stack
- b. Add the section that allows the surveyor to add four student details. Consider that a surveyor can add new pupil's detail without regarding the distortion of the previous arrangement. And add another section that will reduce the pupil's information by dropping six students from the sample. Display the remaining details.
- c. Add the section that allows the surveyor to add five student details. Consider that a surveyor should add new pupil's detail without distorting the previous arrangement. All new details should be added before the details of the first pupil. And add another section that will reduce the pupil's information by dropping six students from the sample.
- d. Add the section that allows the surveyor to add three student details. Consider that a surveyor should add new pupil's detail without distorting the previous arrangement. All new details should be added after the details of the last pupil. And add another section that will reduce the pupil's information by dropping six students from the sample.
- e. During analysis phase; surveyor wanted to arrange student details from the youngest to the eldest and vice versa. As a research assistant write a program with the following subsection:
  - i. Accept the age details of students.
  - ii. Display the age details on the screen.
  - iii. Arrange the age from the youngest to the eldest. Display.
  - iv. Arrange the age from eldest to youngest pupil. Display.