

Department of Statistics and Computer Science
University of Peradeniya

CS 202 - Data Structures Practical (2020/21)

Quiz 1 - Tuesday Session

A teacher wants to store the following details of students. Your task is to implement a java programme which meets the following requirements. You should use any suitable data structure in order to store the following information. Please note that you cannot use default classes which are provided by the java collection framework. Assume that the contact number is unique for each student.

- a. The number of students is not fixed. A student may be added or removed at any time from the list.
- b. The teacher should be able to insert new students at the end, in the middle or at the beginning of the current list.
- c. A student may be removed from any place on the list.
- d. When inserting a student following details should be required. (Create an object Student with the following attributes.)
 - i. Last name
 - ii. First name
 - iii. Contact number
- e. Insert the following students into the list.

Jack
Adams
0123456678

Harry
Smith
0981234567

Irene
Pear
0123456789

Tom
Adams
0981212345

Paul
Victor

0786712345

- f. Remove Harry Smith from the list
- g. Add the following student at the beginning of the student list.
 - Joe
 - Hardy
 - 0123987653
- h. Add the following student details after Irene Pear
 - Sally
 - Potter
 - 0981234578