

SSN College of Engineering  
Department of Information Technology  
**UIT2201 — Programming and Data Structures**

2022 – 2023

**Exercise — 10**

June 7, 2023

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- This homework is due by 10PM on June 14, 2023
  - Grace period may be given up to midnight of June 14, 2023
  - You can upload only one ZIP file
  - The naming convention is “<Your first name (first letter capital and all the other letters small)>-UIT2201-ex-09.zip”
  - Judicious use of Python features and standard modules, version control using 'git', adhering to Python coding standards are expected
  - You are expected to use PSP0.1 process for all the code that you write!

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The purpose of this exercise is to understand the design of Linked implementation of List, Stack, and Queue ADTs.

**Part A**

1. Design and implement Linked List with the following operations.
  - Isemtty
  - Display
  - Find
  - append
  - Insert by pos
  - Delete by pos
  - Insert by specifying previous value.
  - Delete by specifying previous value.
  
2. Design and implement Linked stack and Queue ADT with various operations

