

#### Question

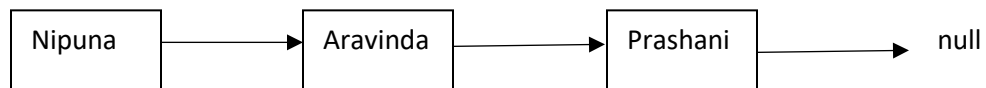
a)

i) Implement Link class to store the name and average of a student. Identify the data attributes required and implement displayDetails() method with the constructor.

ii) In an application, create three links with the following details.

Name	Average
Nipuna	53.5
Aravinda	78.0
Prashani	69.5

iii) Connect the three links as follows.



b)

i) Implement a LinkedList class with the following data members and method

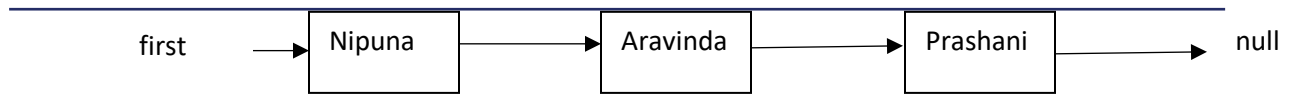
LinkedList
- first
- LinkedList() - isEmpty() - displayList() - insertFirst() - deleteFirst()

ii) In your application, create the following link using the LinkedList class and display the link details.

**BSc (Hons) in Information Technology**  
**Year 2**  
**Data Structures and Algorithms – IT2070**

**Lab Exercise 3 – Link Lists**

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Hint : Use `insertFirst()` method

- iii) Add more links to your link list.
- c) i) Modify your `linkList` class to add a new method called `deleteLink()`. This method will find the link with the given name and delete the link.

Link `deleteLink(String name)`

- ii) Modify your application to delete a given link and display the details of the list.