Dated: 05.08.2024

Date of Submission: 23/08/2024

Problem 3: **Case Study of Single Linked List**: Write a modular program using **Simple Linked List** for managing record of employees of a Company (e.g. CCET Chandigarh may be considered). The attributes of a record are as follows-

* **Employee Id (As a primary key) {Consider 6 Digit Number}**
* **Employee Name {Alphabets a-z(only) and .}**
* **Employee Father’s Name {Alphabets a-z(only) and .}**
* **Employee Mother’s Name {Alphabets a-z(only) and .}**
* **Rank/Position {Alphabets a-z(only) and .}**
* **Department of Work Place {Alphabets a-z(only) and .}**
* **Date of Joining the Company {Only Numeric Value dates and months should not be more than 2 digits and year should not be less or more than 4 digits.**
* **Employee Address**
  + Home/House No
  + Street Name
  + City
  + State
  + Country
  + Pin

The program must contain the following modules.

* Insert a record into the database.
* Delete a record from the database
* Find a Record into the database
* Update a Record {Employee Id cannot be changed}
* Display the records of all the Employee belong to particular city/State/Country/Pin
* Generate report as per requirements {e.g., List the Employee City wise}

Note: Database should not maintain duplication records.