* **Introduction :**

A **student information system** , **student management system**, **school administration software** or **student administration system** is a [management information system](https://en.wikipedia.org/wiki/Management_information_system) for education establishments to manage student data. Student information systems provide capabilities for registering students in courses; documenting [grading](https://en.wikipedia.org/wiki/Grading_(education)), [transcripts](https://en.wikipedia.org/wiki/Transcript_(education)), results of student tests and other [assessment](https://en.wikipedia.org/wiki/Educational_assessment) [scores](https://en.wikipedia.org/wiki/Test_score); building student schedules; tracking student attendance; and managing many other student-related data needs in a school. [Information security](https://en.wikipedia.org/wiki/Information_security) is a concern, as universities house an array of sensitive personal information, making them potentially attractive targets for security breaches, such as those experienced by retail corporations or healthcare providers.

* **Problem Statement :**

**In this Mini Project we Implement Student Database using Linked list for following requirements:**

**a. Creation of Student Database in memory containing student ID, Name, Name**

**Initials, Address, Contact No and Date of Birth.**

**b. Insertion, Deletion, Modification of student record for a given student ID.**

**c. Sorting on name initials and searching a particular student record on name initials.**

* **Design :**

**To implement this project we used certain known data structures such as :**

**Linked List :**

**Linked lists are among the simplest and most common data structures. They can be used to implement several other common**[**abstract data types**](https://en.wikipedia.org/wiki/Abstract_data_type) **though it is not uncommon to implement those data structures directly without using a linked list as the basis.** **Linked lists allow insertion and removal of nodes at any point in the list, and allow doing so with a constant number of operations by keeping the link previous to the link being added or removed in memory during list traversal.**

* **Output :**

**gcc studmanage.c -o studmanage**

**./studmanage.out**

* **Conclusion :**
* This program is helpful to perform paperless work and manage all data ′ as it provides easy, accurate, unambiguous and faster data access.
* Although the student database management module is not fully integrated to the system and used on real time, the system prototype demonstrates easy navigation and data are stored in a systematic way. Overall, efficiency has improved and work processes simplified. Although all the objectives have been met, the system still has room for improvement.
* The program is designed keeping in view the day to day problems faced by an institution.
* Awareness and right information about any college is essential for both the development of student as well as faculty.