

# Student record system



Presented by

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## INTRODUCTION

A student record system is essential for managing student data such as roll number, name, and subject marks efficiently. This project demonstrates a simple record system using arrays for storing basic student details and linked lists for flexible updates to subject marks.





- To create a system that stores and manages student data.
- To sort students based on total marks using an array.
  - To demonstrate dynamic data storage using a linked list.
- To provide a clear and user-friendly display of student records and subject-specific marks.



#### DATASTRUCTURE USED

- Array: Used to store all student records and sort them by total marks.
- Linked List: Used to store and display marks for one subject (e.g., Math), showcasing dynamic memory allocation.



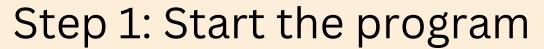


#### ADVANTAGES

- Easy to implement and understand.
- Demonstrates sorting and memory management clearly.
- Scalable for additional subjects or data fields.
- Efficient for small-to-medium datasets.



### ALGORITHM



Step 2: Input the number of students (n)

Step 3: Repeat for each student (1 to n)

Step 4: Sort the array in descending order based on total mark

Step5:Display sorted student records.

Step 6: Create a linked list using Math marks

Step 7: Traverse and display the linked list.

Step 8: Free memory allocated for linked list

Step 9: End the program.







#### SOURCE CODE

https://onlinegdb.com/w3vDqykET

```
Enter number of students: 2
Enter details for student 1:
Name: ira
Math marks: 98
Science marks: 97
English marks: 96
Enter details for student 2:
Name: sri
Math marks: 95
Science marks: 96
English marks: 97
Student Records:
                         Science English Total
ID
        Name
                Math
                98
                         97
                                 96
                                          291
        ira
                                 97
                                          288
                 95
                         96
        sri
```

Math Marks (Linked List): 98 -> 95 -> NULL







This project demonstrates the combination of static (array) and dynamic (linked list) data structures in managing student academic records. Sorting helps rank students, and the linked list offers a flexible way to isolate and manage specific subject marks.



