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Title :- Using File Sequencing for management of student information.

Problem Statement :- The Department maintains a students information. The file contains roll number, name, division and address Allow user to add, delete information of student - - - Display information of particular employee If record of student does not exist an approximate message is displayed If it is, then the system displays the student details use sequential file to main the data

Software Requirement :- Java, - Jvm, 64-bit Fedora etc

Theory :- In the given scenario, we need to implement a system to maintain student information using a sequential file. The system should allow the user to add and delete student information and display the information of a particular student.

1. sequencetial file.
   - A sequential file is a type of the file organization where records are stored in a sequential order based on their physical placement in the file.
   - In this case, we can use a text file to store the student information Each line in the file represents a student record and the fields are seperated by a delimiter like a comma or a tab.

2. Adding student Information.
- To add Student information, the system should prompt the user to enter the roll number, name, division and address of the student.

3. Deleting Student Information
- To add student information, the system should prompt the user to enter the roll number, name, division and address of the student.

4. Deleting Student Interface.
- To delete students information, the system should prompt the user to enter the roll number, name, division and address of the student they want to delete.

5. Displaying Student information.
- To display the information of the particular student, the system should prompt the user to enter full name or the roll number of the student they want to view

6. File Handling operations.
- The system needs to implement the file handling operations to read from and write to the sequential file.
- The file should open in appropriate mode like read, write append.

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File organization refers to the relationships of the key of the record to the physical locations of the record in the computer file. File organization may be either physical or logical
- A physical file is a physical unit, such as magnetic tape or a disk.
- A logical file on the other hand is a complete set of records for a specific application or purpose.
- A logical file may occupy a part of physical file or may extend over more than one physical file.

There are various methods of the file organization. some are:-
1. Sequential file organization
2. Heap file organization
3. Hash / Direct file organization.
4. Indexed sequential organization.
5. B+ Tree file organization.
6. Cluster file organization.

Algorithm:-
1. Start
2. Create a structure to represent a student with the following attributes
3. a. Roll number
   b. Name
   c. Division
   d. Address
3. Define operations addstudent() to add new student to the sequential file.

4. Define function name deleteStudent() to delete the student with given roll number
5. Define displayStudent() to display the information of the student with the given roll number
6. Close the sequential file.
7. Now, we can open the file as requirement like. read, write or in append mode
8. Stop.

Conclusion :- we can maintain student information using a sequential file and perform operations such as adding deleting and displaying student information