



*** Assignment No.: 12 ***

° Title:- Department maintains a student win. The file contains roll number, division and address. Allow User to add, delete information of student. Display if information of particular employee appropriate message is displayed maintain data.

*** Objective**

- i) To Understand concept of its organisation in data structure.
- 2) To Understand concept of various operation on sequential file.

*** Software requirement:-**

g++ / gcc compiler, 64bit fedora, eclipse IDE.

Details of student file like roll no. name, address division etc.

* output :- If records of student does not exist on appropriate message is displayed other wise that student details are displayed.

*** Theory:-**

If records of student does not exist on appropriate message is displayed other wise the records in the computer file. file organisation may be other physical files or logical file.

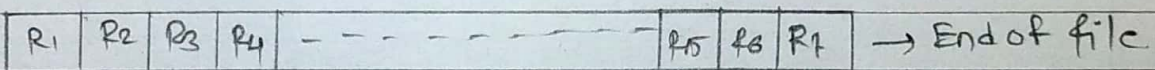
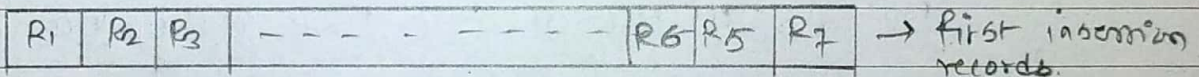


Some of the file organisation are:-

1. Sequential file organisation.
2. Heap a file organisation.
3. Heap / Direct file organisation
4. Indexed Sequential Access method.
5. B+ tree file organisation.

* Sequential file Organisation:-

In the Second method, records are stored either ascending or descending each time they are inserted into the system. This system method is called stored file method.

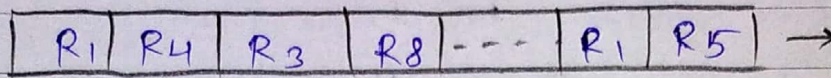


Advantages:-

- 1) Simple to understand.
- 2) Easy to maintain and organize.
- 3) Loading a record require only the record key.
- 4) Relatively inexpensive I/O media and device can be used
- 5) Easy to reconstruct the files.



* Inserting a new Record:-



R₆

New inserted records at the end.

In the above diagram R₁, R₂, R₃, R etc are the records. They contain all the attribute of a row i.e. Then will have when we say that student records. It will have this id, name, address, bourse, DOB etc. Similarly R₁, R₂, R₃ etc. can be considered as one full set of attribute.

* Disadvantage :-

- 1) Failure file must be processed to get specific information.
- 2) Very low Activity rate started
- 3) Transactions must be sorted and place in sequence prior to process.
- 4) Data redundancy is high as same data can be sorted to different place with different
- 5) Impossible to handle random enquiries.

* Algorithm:-

- 1) Start.
- 2) Create a file with proper name.
- 3) Write a menu driven program for creating, displaying, operation, updating, deletion, appending



Searching Operation on data present in the choice switch to that case.

- 5) Ask user do you want to continue? If yes, then again go to step 3 or goto next 6) stop.

* Conclusion:

Hence we studied and implemented sequential file organisation.