# ASSIGNMENT 09

## Aim:

Department maintains a employee information. The file contains employee ID, name, designation and salary . Allow user to add, delete information of employee. Display information of particular employee. If employee does not exist an appropriate message is displayed. If it is, then the system displays the employee details. Use index sequential file to main the data.

## Objective:

To make use of index sequential files to maintain and operation on data.

## Theory:

Index Sequential File:

This is basically a mixture of sequential and indexed file organisation techniques. Records are held in sequential order and can be accessed randomly through an index. Thus, these files share the merits of both systems enabling sequential or direct access to the data.

The index to these files operates by storing the highest record key in given cylinders and tracks. Note how this organisation gives the index a tree structure. Obviously this type of file organisation will require a direct access device, such as a hard disk.

Indexed sequential file organisation is very useful where records are often retrieved randomly and are also processed in (sequential) key order. Banks may use this organisation for their auto-bank machines i.e. customers randomly access their accounts throughout the day and at the end of the day the banks can update the whole file sequentially.

Advantages of Indexed Sequential Files:

1.Allows records to be accessed directly or sequentially.

2.Direct access ability provides vastly superior (average)

acces
s
times.

Disadvantages of Indexed Sequential Files:

1.The fact that several tables must be stored for the index makes for a considerable storage overhead.

2.As the items are stored in a sequential fashion this adds complexity to the

addition/deletion of records. Because frequent updating can be very inefficient, especially for large files, batch updates are often performed.

## Code:

## Output:

## Conclusion:

In above assignment, we made the use of index sequential files to operate on employee data.