

# Clustered Index

in-disk b-tree data structure consist of 3 levels :

1- root node : contain  
- clustered index keys  
- with address of pages of other lower index pages

2- intermediate nodes : contain  
- clustered index keys  
- with address of pages of other lower index pages  
- or address of actual data pages

3- leaf nodes : contain  
- actual data pages

data is stored on disk with order  
- Index Key Is Sorted in Indexes Pages in Root or intermediate nodes  
- rows is Sorted ( Logically or Physically ) in Actual Data Pages in last level