

# index

Jing Huang, 1003490705, huang750  
Si Tong Liu, 1004339628, liusi17

November 2019

1.

- (1) Index on the ID from Person: Person(ID)
- (2) Primary, clustered, B+ tree index: each node in the B+ tree represents one ID from a person
- (3) This index can help q(2), q(6), q(9), q(10) b) and c). Since if we want to search for a specific ID for a person, we need to scan the entire Person table. However, if we define a B+ tree index on Person(ID), we only need to find the node that contains the ID we want which will be much more sufficient.

2.

- (1) Index on Disease from Diagnose: Diagnose(Disease)
- (2) Secondary, unclustered, hash index: Each bucket is a kind of disease. And all the records will be added after the corresponding bucket.
- (3) This index can help q(5) and q(9). Since if we want to search for record with specific disease from Diagnose table, we will search the whole table. But with the hash index on Diagnose(Disease), we only need to look at the overflows pages inside the specific buckets.