Q] Consider a Data Warehouse for a hospital where there are three dimension
(a) Doctor (b) Patient (c) Time
And two measures i) count ii) charge where charge is the fee that the doctor charges a patient for a visit
Using the above example describe the following OLAP operations.
1) Slice 2) Dice 3) Roll up 4) Drill down
5) Pivot

⇒ Dimention Table:

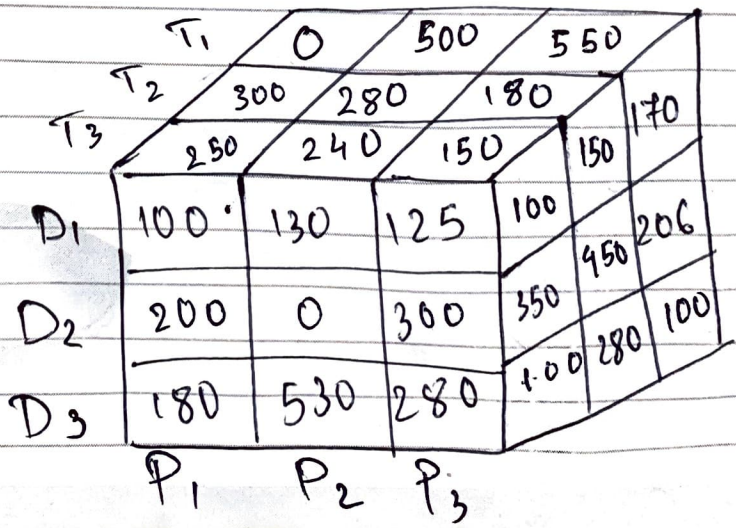
1) Doctor (DID, name, mob, add, specialization)

2) Patient (PID, name, mob, add)

3) Time (TID, day, month, quarter, year)

Fact Table:

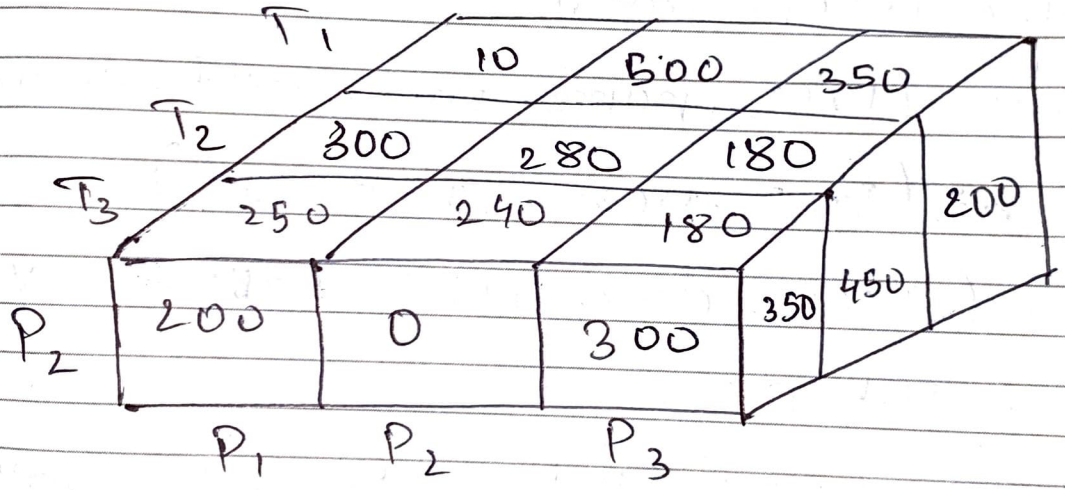
fact_table (DID, PID, TID, count, charge)



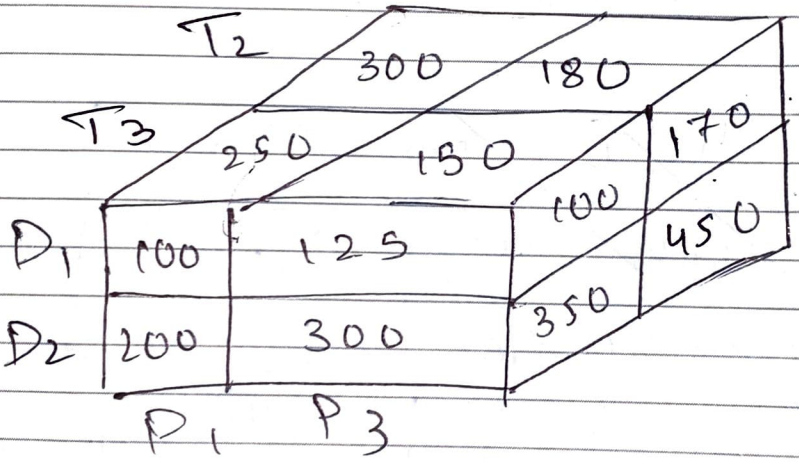
## Operation 3:

### 1) Slice:

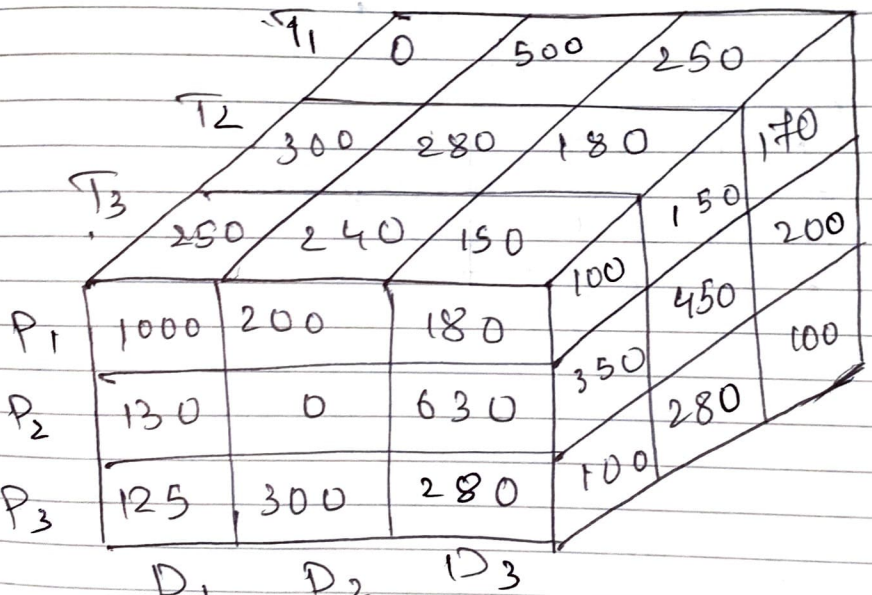
Slice on fact table with DID = 1 this acts the cube at DID = 2 along the time & Patient axis it will display area of cube in which time on x & patient on y axis



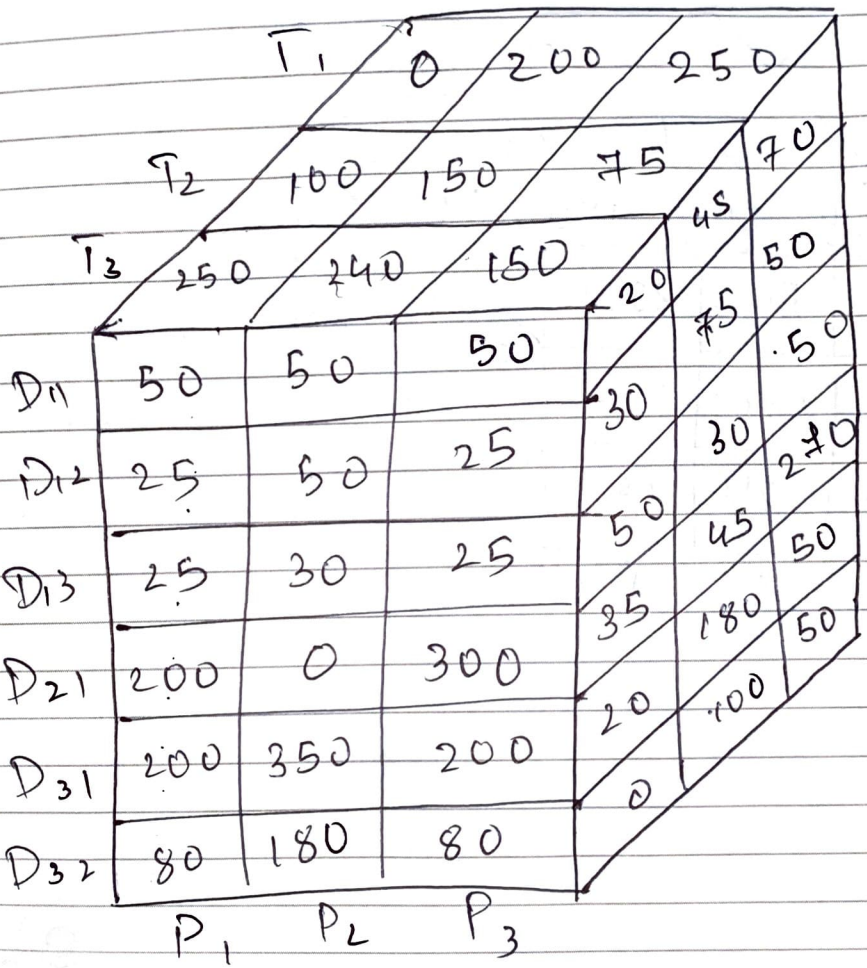
2) Dice: It is a subcube of main cube Thus it cuts the cube with more than predicate like dice on cube with DID=2 & DID=1 & PID=1 & PID=3 & TID= 02 & 03



3) Roll up: It gives summary based on concept hierarchi or. Assuming there exists concept hierarchy in patient table as state → city → Location. The roll up will summarize the changes or count in terms of city or further roll up will give changes for a particular state etc.



4) Drill Down: It is opposite to roll up that means if currently cube is summarised with also show detailed view.



5) Pivot: It rotates the cube sub cube or rolled up or drilled down cube, thus changing the view of the cube.