


## Experiment 2: OLAP Operations

### 1. Slice Operation:

Statement 48




```
select Patient_id , Charge
from Fact_table natural join Patient_dt
where sex='M'
```

PATIENT_ID	CHARGE
203	1000
201	2500
202	2000
204	4200

4 rows selected.

### 2. Dice Operation:

Statement 49



```
select Patient_id , Charge
from Fact_table natural join Patient_dt
where sex='M'and Patient_id>=202
```

PATIENT_ID	CHARGE
203	1000
202	2000
204	4200

3 rows selected.

### 3. Roll Up Operation:

Statement 59




```
select year,sum(charge)
from ((Fact_table natural join Patient_dt)join Time_dt on Fact_table.time_key
Group by year
```

YEAR	SUM(CHARGE)
2019	3000
2020	5700
2018	2500

3 rows selected.

### 4. Drill-down Operation:

Statement 60



```
select Quarter,sum(charge)
from ((Fact_table natural join Patient_dt)join Time_dt on Fact_table.time_key
Group by Quarter
```

QUARTER	SUM(CHARGE)
Q4	2000
Q1	1500
Q2	2500
Q3	5200

4 rows selected.