

Assignment 11: Implementation of OLAP Queries.

Commands-

1)create table locations,sales,products,time with at least 5 records.

```
mysql> insert into locations values(1,"madison","W1","USA"),(2,"fresno","CA","USA"),(3,"Chennai","TN","India");
```

Query OK, 3 rows affected (0.07 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from locations;
```

locid	city	state	country
1	madison	W1	USA
2	fresno	CA	USA
3	Chennai	TN	India

3 rows in set (0.00 sec)

```
mysql> create table sales(pid int,timeid int,locid int,sales int);
```

Query OK, 0 rows affected (0.34 sec)

```
mysql> insert into sales values(11,1,1,25),(11,2,1,8),(11,3,1,15),(12,1,1,30),(12,2,1,20),(13,1,1,8),(13,2,1,10),(13,3,1,10);
```

Query OK, 8 rows affected (0.08 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> select * from sales;
```

pid	timeid	locid	sales
11	1	1	25
11	2	1	8
11	3	1	15
12	1	1	30
12	2	1	20
13	1	1	8
13	2	1	10
13	3	1	10

8 rows in set (0.00 sec)

```
mysql> create table products(pid int,pname varchar(20),category varchar(20),price int);
Query OK, 0 rows affected (0.33 sec)
```

```
mysql> insert into products values(11,"Lee Jeans","Apparell",25),(12,"Zord","Toys",18),(13,"Biro Pen",
"Stationary",2);
Query OK, 3 rows affected (0.10 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> select * from products;
```

pid	pname	category	price
11	Lee Jeans	Apparell	25
12	Zord	Toys	18
13	Biro Pen	Stationary	2

```
3 rows in set (0.00 sec)
```

```
mysql> create table time(timeid int,year int);
Query OK, 0 rows affected (0.35 sec)
```

```
mysql> insert into time values(1,2016),(2,2017),(3,2018);
Query OK, 3 rows affected (0.08 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> select * from time;
```

timeid	year
1	2016
2	2017
3	2018

```
3 rows in set (0.00 sec)
```

2)Execute the CUBE & ROLLUP operator.

```
mysql> SELECT T.year,L.state,SUM(S.sales)
-> FROM sales S, time T, locations L
-> WHERE S.timeid=T.timeid and S.locid=L.locid
-> GROUP BY T.year, L.state;
```

year	state	SUM(S.sales)
2018	W1	25
2017	W1	38
2016	W1	63

```
3 rows in set (0.03 sec)
```

```
mysql> SELECT T.year,SUM(S.sales)
-> FROM sales S, time T
-> WHERE S.timeid=T.timeid
-> GROUP BY T.year;
```

year	SUM(S.sales)
2016	63
2017	38
2018	25

3 rows in set (0.00 sec)

```
mysql> SELECT L.state,SUM(S.sales)
-> FROM sales S, locations L
-> WHERE S.locid=L.locid
-> GROUP BY L.state;
```

state	SUM(S.sales)
W1	126

1 row in set (0.00 sec)

```
mysql> SELECT pid,SUM(sales) FROM sales GROUP BY pid WITH ROLLUP;
```

pid	SUM(sales)
11	48
12	50
13	28
NULL	126

4 rows in set (0.00 sec)

Group by Cube-

```
select * from sales;
```

Results Explain Describe Saved SQL History

PID	TIMEID	LOCID	SALES
11	1	1	25
11	2	1	8
12	1	1	25
12	2	1	25

4 rows returned in 0.00 seconds

[CSV Export](#)

```
select pid,sum(pid) from sales group by cube(pid);
```

Results Explain Describe Saved SQL History

PID	SUM(PID)
-	46
11	22
12	24

3 rows returned in 0.11 seconds

[CSV Export](#)