**EXPERIMENT 2**

**ROLLUP**

**On time**

SELECT time\_key, sum(units\_sold) FROM salesfact GROUP BY time\_key WITH ROLLUP;

+----------+-----------------+

| time\_key | sum(units\_sold) |

+----------+-----------------+

| 1 | 9 |

| 2 | 19 |

| 3 | 13 |

| 4 | 3 |

| 6 | 40 |

| 7 | 2 |

| 8 | 503 |

| 9 | 2 |

| 10 | 10 |

| 11 | 30 |

| 12 | 15 |

| 13 | 48 |

| 14 | 3 |

| 15 | 8 |

| NULL | 705 |

+----------+-----------------+

15 rows in set (0.00 sec)

**On stores**

SELECT store\_key, sum(units\_sold) FROM salesfact GROUP BY store\_key WITH ROLLUP;

+-----------+-----------------+

| store\_key | sum(units\_sold) |

+-----------+-----------------+

| 1 | 517 |

| 2 | 4 |

| 3 | 3 |

| 4 | 4 |

| 5 | 20 |

| 6 | 8 |

| 7 | 5 |

| 8 | 9 |

| 9 | 21 |

| 10 | 15 |

| 11 | 30 |

| 12 | 60 |

| 13 | 4 |

| 14 | 2 |

| 16 | 3 |

| NULL | 705 |

+-----------+-----------------+

16 rows in set (0.01 sec)

**On product**

SELECT product\_key, sum(units\_sold) FROM salesfact GROUP BY product\_key WITH ROLLUP;

+-------------+-----------------+

| product\_key | sum(units\_sold) |

+-------------+-----------------+

| 1 | 11 |

| 2 | 40 |

| 3 | 28 |

| 4 | 5 |

| 5 | 18 |

| 6 | 3 |

| 7 | 90 |

| 8 | 30 |

| 9 | 10 |

| 10 | 107 |

| 12 | 38 |

| 13 | 28 |

| 14 | 17 |

| NULL | 425 |

+-------------+-----------------+

14 rows in set (0.00 sec)

**SLICE:**

**On time**

mysql> SELECT product\_key, store\_key,sales\_amount\_MRP\_rupees FROM salesfact

-> WHERE time\_key in(select t\_key from tdt where year=2018);

+-------------+-----------+-------------------------+

| product\_key | store\_key | sales\_amount\_MRP\_rupees |

+-------------+-----------+-------------------------+

| 5 | 8 | 324.00 |

| 3 | 13 | 20.00 |

| 4 | 16 | 30.00 |

| 14 | 1 | 56.00 |

| 2 | 10 | 127.89 |

| 2 | 10 | 127.89 |

| 3 | 9 | 110.00 |

| 13 | 12 | 735.00 |

| 6 | 4 | 80.00 |

| 12 | 11 | 2094.75 |

| 2 | 12 | 84.00 |

| 2 | 15 | 28.00 |

| 9 | 2 | 84.00 |

| 9 | 2 | 84.00 |

| 9 | 2 | 84.00 |

| 14 | 10 | 828.00 |

| 2 | 16 | 84.00 |

| 5 | 6 | 84.00 |

| 5 | 6 | 84.00 |

| 5 | 6 | 84.00 |

| 10 | 12 | 2704.80 |

| 12 | 6 | 158.40 |

| 2 | 16 | 112.00 |

| 13 | 16 | 112.00 |

| 1 | 3 | 60.00 |

| 2 | 11 | 56.00 |

| 1 | 1 | 178.78 |

| 2 | 13 | 84.00 |

| 10 | 3 | 84.00 |

+-------------+-----------+-------------------------+

29 rows in set (0.00 sec)

**On store**   
mysql> SELECT time\_key, product\_key,sales\_amount\_MRP\_rupees FROM salesfact WHERE product\_key in(select store\_key from sdt where state="karnataka");

+----------+-------------+-------------------------+

| time\_key | product\_key | sales\_amount\_MRP\_rupees |

+----------+-------------+-------------------------+

| 15 | 1 | 178.78 |

| 1 | 2 | 123.20 |

| 2 | 4 | 22.00 |

| 8 | 9 | 48.00 |

| 10 | 10 | 127.89 |

| 10 | 10 | 562.10 |

+----------+-------------+-------------------------+

6 rows in set (0.00 sec)

**On product**

select time\_key,store\_key,units\_sold from salesfact where product\_key in(select p\_key from pdt where category="namkeen");

+----------+-----------+------------+

| time\_key | store\_key | units\_sold |

+----------+-----------+------------+

| 3 | 8 | 9 |

| 12 | 6 | 3 |

| 12 | 6 | 3 |

| 12 | 6 | 3 |

| 1 | 7 | 1 |

| 7 | 4 | 2 |

| 2 | 1 | 7 |

| 1 | 5 | 1 |

| 1 | 5 | 1 |

| 9 | 8 | 40 |

| 1 | 5 | 1 |

| 9 | 8 | 40 |

+----------+-----------+------------+

12 rows in set (0.00 sec)

**DICE:**

select \* from salesfact where product\_key in(select p\_key from pdt where name="pepsodent" or name="parle g") and time\_key in(select t\_key from tdt where quarter="q1" or quarter="q2") and store\_key in (select s\_key from sdt where city="mumbai" or city="kolkata");

+-------------+----------+-----------+---------------+------------+-------------------------+-------------------+

| product\_key | time\_key | store\_key | promotion\_key | units\_sold | sales\_amount\_MRP\_rupees | profit\_percentage |

+-------------+----------+-----------+---------------+------------+-------------------------+-------------------+

| 3 | 3 | 13 | NULL | 4 | 20.00 | NULL |

| 10 | 9 | 14 | 8 | 2 | 127.89 | 5 |

+-------------+----------+-----------+---------------+------------+-------------------------+-------------------+

2 rows in set (0.01 sec)