**Assignment - 12**

**Assignment Title:**

# Practice the OLAP queries for sales tables, implement the operation of OLAP (rollup, slicing, dicing, pivoting etc).

**Program:**

Create databse samiksha;

Use samiksha;

Create table sales(

Item\_name varchar(20),

Color varchar(20),

Clothes\_size varchar(20),

Quantity int

);

Insert into sales values

(‘skirt’,’dark’,’medium’,5),

();

mysql> select \* from sales;

|  |  |  |  |
| --- | --- | --- | --- |
| ITEM\_NAME | COLOR | CLOTHES\_SIZE | QUANTITY |
| skirt | dark | medium | 5 |
| skirt | dark | large | 1 |
| skirt | pastel | small | 11 |
| skirt | pastel | medium | 9 |
| skirt | pastel | large | 15 |
| skirt | white | small | 2 |
| skirt | white | medium | 5 |
| skirt | white | large | 3 |
| dress | dark | small | 2 |
| dress | dark | medium | 6 |
| dress | dark | large | 12 |
| dress | pastel | small | 4 |
| dress | pastel | medium | 3 |
| dress | pastel | large | 3 |
| dress | white | small | 2 |
| dress | white | medium | 3 |
| dress | white | large | 0 |
| shirt | dark | small | 2 |
| shirt | dark | medium | 6 |
| shirt | dark | large | 6 |
| shirt | pastel | small | 4 |
| shirt | pastel | medium | 1 |
| shirt | pastel | large | 2 |
| shirt | white | small | 17 |
| shirt | white | medium | 1 |
| shirt | white | large | 10 |
| pant | dark | small | 14 |
| pant | dark | medium | 6 |
| pant | dark | large | 0 |
| pant | pastel | small | 1 |
| pant | pastel | medium | 0 |
| pant | pastel | large | 1 |
| pant | white | small | 3 |
| pant | white | medium | 0 |
| pant | white | large | 2 |

mysql> select item\_name , color, sum(quantity) from sales group by cube(item\_name, color);

|  |  |  |
| --- | --- | --- |
| ITEM\_NAME | COLOR | SUM(QUANTITY) |
| - | - | 162 |
| - | dark | 60 |
| - | white | 48 |
| - | pastel | 54 |
| pant | - | 27 |
| pant | dark | 20 |
| pant | white | 5 |
| pant | pastel | 2 |
| dress | - | 35 |
| dress | dark | 20 |
| dress | white | 5 |
| dress | pastel | 10 |
| pant | - | 0 |
| pant | white | 0 |
| pant | pastel | 0 |
| shirt | - | 49 |
| shirt | dark | 14 |
| shirt | white | 28 |
| shirt | pastel | 7 |
| skirt | - | 51 |
| skirt | dark | 6 |
| skirt | white | 10 |
| skirt | pastel | 35 |

mysql> select item\_name, sum(quantity) from sales where item\_name = 'skirt';

|  |  |
| --- | --- |
| ITEM\_NAME | SUM(QUANTITY) |
| skirt | 51 |

mysql> select item\_name, sum(quantity) from sales group by item\_name;

|  |  |
| --- | --- |
| ITEM\_NAME | SUM(QUANTITY) |
| dress | 35 |
| skirt | 51 |
| shirt | 49 |
| pant | 0 |
| pant | 27 |

mysql> select sum(quantity) from sales group by color;

|  |
| --- |
| SUM(QUANTIT  Y) |
| 60 |
| 54 |
| 48 |

mysql> select item\_name,color,clothes\_size,sum(quantity)from sales group by rollup (item\_name,color,clothes\_size);

|  |  |  |  |
| --- | --- | --- | --- |
| ITEM\_NAME | COLOR | CLOTHES\_SIZE | SUM(QUANTITY) |
| pant | dark | large | 0 |
| pant | dark | small | 14 |
| pant | dark | medium | 6 |
| pant | dark | - | 20 |
| pant | white | large | 2 |
| pant | white | small | 3 |
| pant | white | - | 5 |
| pant | pastel | large | 1 |
| pant | pastel | small | 1 |
| pant | pastel | - | 2 |
| pant | - | - | 27 |

|  |  |  |  |
| --- | --- | --- | --- |
| dress | dark | large | 12 |
| dress | dark | small | 2 |
| dress | dark | medium | 6 |
| dress | dark | - | 20 |
| dress | white | large | 0 |
| dress | white | small | 2 |
| dress | white | medium | 3 |
| dress | white | - | 5 |
| dress | pastel | large | 3 |
| dress | pastel | small | 4 |
| dress | pastel | medium | 3 |
| dress | pastel | - | 10 |
| dress | - | - | 35 |
| pant | white | medium | 0 |
| pant | white | - | 0 |
| pant | pastel | medium | 0 |
| pant | pastel | - | 0 |
| pant | - | - | 0 |
| shirt | dark | large | 6 |
| shirt | dark | small | 2 |
| shirt | dark | medium | 6 |
| shirt | dark | - | 14 |
| shirt | white | large | 10 |
| shirt | white | small | 17 |
| shirt | white | medium | 1 |
| shirt | white | - | 28 |
| shirt | pastel | large | 2 |
| shirt | pastel | small | 4 |
| shirt | pastel | medium | 1 |
| shirt | pastel | - | 7 |
| shirt | - | - | 49 |
| skirt | dark | large | 1 |
| skirt | dark | medium | 5 |
| skirt | dark | - | 6 |
| skirt | white | large | 3 |
| skirt | white | small | 2 |
| skirt | white | medium | 5 |
| skirt | white | - | 10 |
| skirt | pastel | large | 15 |

mysql> select item\_name,color,clothes\_size,sum(quantity)from sales group by rollup (item\_name,color,clothes\_size);

|  |  |  |  |
| --- | --- | --- | --- |
| ITEM\_NAME | COLOR | CLOTHES\_SIZE | SUM(QUANTITY) |
| pant | dark | large | 0 |
| pant | dark | small | 14 |
| pant | dark | medium | 6 |
| pant | dark | - | 20 |
| pant | white | large | 2 |
| pant | white | small | 3 |
| pant | white | - | 5 |
| pant | pastel | large | 1 |
| pant | pastel | small | 1 |
| pant | pastel | - | 2 |
| pant | - | - | 27 |
| dress | dark | large | 12 |
| dress | dark | small | 2 |
| dress | dark | medium | 6 |
| dress | dark | - | 20 |
| dress | white | large | 0 |
| dress | white | small | 2 |
| dress | white | medium | 3 |
| dress | white | - | 5 |
| dress | pastel | large | 3 |
| dress | pastel | small | 4 |
| dress | pastel | medium | 3 |
| dress | pastel | - | 10 |
| dress | - | - | 35 |
| pant | white | medium | 0 |
| pant | white | - | 0 |
| pant | pastel | medium | 0 |
| pant | pastel | - | 0 |
| pant | - | - | 0 |
| shirt | dark | large | 6 |
| shirt | dark | small | 2 |
| shirt | dark | medium | 6 |
| shirt | dark | - | 14 |
| shirt | white | large | 10 |
| shirt | white | small | 17 |
| shirt | white | medium | 1 |
| shirt | white | - | 28 |
| shirt | pastel | large | 2 |
| shirt | pastel | small | 4 |
| shirt | pastel | medium | 1 |
| shirt | pastel | - | 7 |
| shirt | - | - | 49 |
| skirt | dark | large | 1 |
| skirt | dark | medium | 5 |
| skirt | dark | - | 6 |
| skirt | white | large | 3 |
| skirt | white | small | 2 |
| skirt | white | medium | 5 |
| skirt | white | - | 10 |
| skirt | pastel | large | 15 |