FAIZAN CHOUDHARY

20BCS021

DBMS LAB

7th March 2022

Creation:

```
mysql> use 20bcs021 faizan;
mysql> create table Sales
    -> order id int,
    -> date date,
    -> price
                int(5),
                int,
    -> qty
    -> cust
              varchar(15)
    -> );
mysql> insert into Sales values
    -> (1, '2005/12/22', 160, 2, 'Smith'),
    -> (2, '2005/08/10', 190, 3, 'Johnson'),
    -> (3, '2005/07/13', 500, 5, 'Baldwin'),
    -> (4, '2005/07/15', 420, 2, 'Smith'),
    -> (5, '2005/12/22', 1000, 4, 'Wood'),
    -> (6, '2005/10/02', 820, 4, 'Smith'),
    -> (7, '2005/11/03', 2000, 2, 'Baldwin');
```

mysql> select * from Sales;

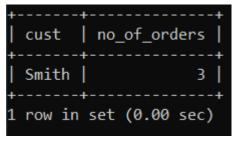
```
mysql> select * from Sales;
                     | price | qty | cust
 order_id | date
        1 | 2005-12-22
                          160
                                   2
                                      Smith
        2
                                   3
            2005-08-10
                          190
                                       Johnson
        3 | 2005-07-13 |
                          500
                                   5 | Baldwin
        4 | 2005-07-15 |
                          420
                                       Smith
        5 | 2005-12-22 |
                         1000
                                   4
                                       Wood
                                       Smith
          2005-10-02
                          820
                                   4
                         2000
           2005-11-03
                                      Baldwin
 rows in set (0.00 sec)
```

Queries:

1. Count how many orders have made a customer with CustomerName of Smith.

```
mysql> select cust, count(*) as no_of_orders
    -> from Sales
    -> where cust = 'Smith';
```

OUTPUT:



2. Find number of unique customers that have ordered from the store.

```
mysql> select count(distinct cust) as no_of_cust
     -> from Sales;
```

OUTPUT:

```
+----+
| no_of_cust |
+-----+
| 4 |
+-----+
1 row in set (0.00 sec)
```

3. Find out total no. of items ordered by all the customers.

```
mysql> select sum(qty) as tot_items
    -> from Sales;
```

OUTPUT:

```
+-----+
| tot_items |
+------+
| 22 |
+------+
1 row in set (0.00 sec)
```

4. Find out average number of items per order.

```
mysql> select avg(qty) as avg_items
    -> from Sales;
```

```
+-----+
| avg_items |
+------+
| 3.1429 |
+------+
1 row in set (0.00 sec)
```

5. Find out the average Quantity for all orders with Price greater than 200.

```
mysql> select avg(qty) as avg_items
-> from Sales
-> where price > 200;
```

OUTPUT:

```
+-----+
| avg_items |
+-----+
| 3.4000 |
+-----+
1 row in set (0.00 sec)
```

6. Find out what was the minimum price paid for any of the orders.

```
mysql> select min(price) as min_price
    -> from Sales;
```

OUTPUT:

```
+-----+
| min_price |
+------+
| 160 |
+-----+
1 row in set (0.00 sec)
```

7. Find out the highest Price from the given sales table.

```
mysql> select max(price) as max_price
    -> from Sales;
```

OUTPUT:

```
+-----+
| max_price |
+-----+
| 2000 |
+-----+
1 row in set (0.00 sec)
```

8. List out unique customers name only from the table.

```
mysql> select distinct cust
    -> from Sales;
```

9. List out name of the customers who have given order in the month of December.

```
mysql> select cust
   -> from Sales
   -> where date like '____-12-__';
```

OUTPUT:

```
+----+
| cust |
+----+
| Smith |
| Wood |
+----+
2 rows in set (0.00 sec)
```

10. Find out the total amount of money spent for each of the customers.

```
mysql> select cust, sum(price*qty) as tot_amt
    -> from Sales
    -> group by cust;
```

OUTPUT:

11. Select all unique customers who have spent more than 1200 in the store.

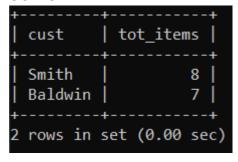
```
mysql> select distinct cust, sum(price*qty) as amt
   -> from Sales
   -> group by cust
   -> having amt > 1200;
```

12. Select all customers that have ordered more than 5 items in total from all their orders.

```
mysql> select cust, sum(qty) as tot_items
    -> from Sales
```

- -> group by cust
- -> having tot items > 5;

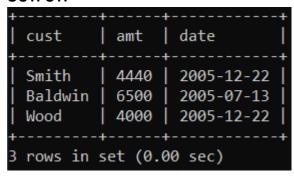
OUTPUT:



13. Select all customers who have spent more than 1000, after 10/01/2005.

```
mysql> select cust, sum(price*qty) as amt, date
    -> from Sales
    -> group by cust
    -> having amt > 1000 and date > '2005-01-10';
```

OUTPUT:



14. Select orders in increasing order of order price.

```
mysql> select *
   -> from Sales
   -> order by price asc;
```

OUTPUT:

+ order_id	+ date	price	qty	cust		
+	+	160 190 420 500 820 1000	2 3 2 5 4 4	Smith Johnson Smith Baldwin Smith Wood Baldwin		
7 2003-11-03 2000 2 Baldwin ++ 7 rows in set (0.00 sec)						

15. Select orders in decreasing order of order price.

mysql> select *

- -> from Sales
- -> order by price desc;

001P01:	+	+				
order_id	date	price	qty	cust		
7	2005-11-03	2000	2	Baldwin		
5	2005-12-22	1000	4	Wood		
6	2005-10-02	820	4	Smith		
] 3	2005-07-13	500	5	Baldwin		
4	2005-07-15	420	2	Smith		
2	2005-08-10	190	3	Johnson		
1	2005-12-22	160	2	Smith		
++						
7 rows in set (0.00 sec)						