**Joins :**

C:\Program Files\MySQL\MySQL Server 9.4\bin>mysql -h localhost -u root -p

Enter password: \*\*\*\*\*\*\*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 26

Server version: 9.4.0 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use inventory;

Database changed

mysql> desc supplier;

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

| Field | Type | Null | Key | Default | Extra |

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

| supp\_id | int | NO | PRI | NULL | |

| supp\_name | varchar(100) | YES | | NULL | |

| supp\_address | varchar(150) | YES | | NULL | |

| mail\_add | varchar(100) | YES | | NULL | |

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

4 rows in set (0.027 sec)

mysql> desc product;

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

| Field | Type | Null | Key | Default | Extra |

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

| p\_id | int | NO | PRI | NULL | |

| p\_name | varchar(100) | YES | | NULL | |

| price | float | YES | | NULL | |

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

3 rows in set (0.013 sec)

mysql> desc sell;

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

| Field | Type | Null | Key | Default | Extra |

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

| s\_id | int | YES | | NULL | |

| qty | int | YES | | NULL | |

| p\_id | int | YES | MUL | NULL | |

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

3 rows in set (0.021 sec)

mysql> select \* from sell as s

-> inner join product as p

-> on s.p\_id=p.p\_id;

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

| s\_id | qty | p\_id | p\_id | p\_name | price |

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

| 230 | NULL | 104 | 104 | NULL | NULL |

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

1 row in set (0.011 sec)

mysql> select \* from sell as s

-> left join product as p

-> on s.p\_id=p.p\_id;

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

| s\_id | qty | p\_id | p\_id | p\_name | price |

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

| 230 | NULL | 104 | 104 | NULL | NULL |

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

1 row in set (0.006 sec)

mysql> select \* from sell as s

-> right join product as p

-> on s.p\_id=p.p\_id;

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

| s\_id | qty | p\_id | p\_id | p\_name | price |

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

| 230 | NULL | 104 | 104 | NULL | NULL |

| NULL | NULL | NULL | 1024 | Milk | 74 |

| NULL | NULL | NULL | 3201 | Cheese | 120 |

| NULL | NULL | NULL | 7458 | Apple | 150 |

| NULL | NULL | NULL | 9845 | Bread | 80 |

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

5 rows in set (0.005 sec)

mysql> select \* from sell as s

-> left join product as p

-> on s.p\_id=p.p\_id

-> union

-> select \* from sell as s

-> right join product as p

-> on s.p\_id=p.p\_id;

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

| s\_id | qty | p\_id | p\_id | p\_name | price |

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

| 230 | NULL | 104 | 104 | NULL | NULL |

| NULL | NULL | NULL | 1024 | Milk | 74 |

| NULL | NULL | NULL | 3201 | Cheese | 120 |

| NULL | NULL | NULL | 7458 | Apple | 150 |

| NULL | NULL | NULL | 9845 | Bread | 80 |

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

5 rows in set (0.008 sec)

**Aggregate Functions :**

mysql> desc product;

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

| Field | Type | Null | Key | Default | Extra |

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

| p\_id | int | NO | PRI | NULL | |

| p\_name | varchar(100) | YES | | NULL | |

| price | float | YES | | NULL | |

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

3 rows in set (0.031 sec)

mysql> select count(p\_name),p\_name from product group by p\_name;

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

| count(p\_name) | p\_name |

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

| 0 | NULL |

| 1 | Milk |

| 1 | Cheese |

| 1 | Apple |

| 1 | Bread |

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

5 rows in set (0.011 sec)

mysql> select max(price),p\_id from product group by p\_id;

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

| max(price) | p\_id |

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

| NULL | 104 |

| 74 | 1024 |

| 120 | 3201 |

| 150 | 7458 |

| 80 | 9845 |

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

5 rows in set (0.007 sec)

mysql> select AVG(price) from product;

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

| AVG(price) |

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

| 106 |

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

1 row in set (0.006 sec)

mysql> select MAX(price) from product;

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

| MAX(price) |

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

| 150 |

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

1 row in set (0.008 sec)

mysql> select min(price) from product;

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

| min(price) |

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

| 74 |

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

1 row in set (0.005 sec)

mysql> select SUM(price) from product;

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

| SUM(price) |

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

| 424 |

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

1 row in set (0.006 sec)