**Order by, group by,having**

1. create table Department with dept\_id(integer),dept\_name(varchar(50)).

dept\_id will be foreign key in Employee table.

**Employee table**

---------------------------

empid emp\_name dept\_id salary manager

1 Arun 1 8000 4

2 kiran 1 7000 1

3 Scott 1 3000 1

4 Max 2 9000

5 Jack 2 8000 4

6 King 6000 1

**Department table**

-------------

dept\_id dept\_name

1 Finance

2 Training

3 Marketing

Apply not null, primary key and foreign key constraints.

create table department

(

dept\_id int(5) not null,

dept\_name varchar(50),

primary key(dept\_id)

);

create table employee1

(

emp\_id int(5) not null,

emp\_name varchar(50),

dept\_id int(5),

salery int(10),

manager int(5),

primary key(emp\_id),

constraint fk\_emp\_deptid foreign key (dept\_id) references department(dept\_id)

);

INSERT INTO DEPARTMENT VALUES (1,'Finance');

INSERT INTO DEPARTMENT VALUES (2,'Training');

INSERT INTO DEPARTMENT VALUES (3,'Marketing');

INSERT INTO EMPLOYEE1 VALUES (1,'Arun',1,8000,4);

INSERT INTO EMPLOYEE1 VALUES (2,'Kiran',1,7000,1);

INSERT INTO EMPLOYEE1 VALUES (3,'Scott',1,3000,1);

INSERT INTO EMPLOYEE1 VALUES (4,'Max',2,9000,null);

INSERT INTO EMPLOYEE1 VALUES (5,'Jack',2,8000,4);

INSERT INTO EMPLOYEE1 VALUES (6,'King',null,6000,1);

\*\*\*\*\*\*\*\*\*\*\*order by

1. select all from authors sort ascending by author name.

**mysql> select \* from authors order by aname;**

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

| AUID | ANAME | EMAIL | PHONE |

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

| 103 | DAVAID HUNTER | HUNTER@HOTMAIL.COM | NULL |

| 106 | ED. ROMANS | ROMANS@THESERVERSIDE.COM | NULL |

| 101 | HERBERT SCHILD | HERBERT@YAHOO.COM | NULL |

| 102 | JAMES GOODWILL | GOODWILL@HOTMAIL.COM | NULL |

| 105 | KEVIN LONEY | LONEY@ORACLE.COM | NULL |

| 104 | STEPHEN WALTHER | WALTHER@GMAIL.COM | NULL |

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

2. select all from publishers sort descending by publisher name.

**mysql> select \* from publishers order by pname desc;**

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

| PUBID | PNAME | EMAIL | PHONE |

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

| 3 | TATA MCGRAW-HILL | FEEDBACK@TATAMCGRAWHILL.COM | 91-11-33333322 |

| 4 | TECHMEDIA | BOOKS@TECHMEDIA.COM | 91-11-33257660 |

| 1 | WILLEY | WDT@VSNL.NET | 91-11-23260877 |

| 2 | WROX | INFO@WROX.COM | NULL |

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

\*\*\*\*\*\*\*\*\*\*\*group by

1. select all data and sum of salary from employee and group according to dept\_id.

**mysql> select \*, sum(salery) from employee1 group by dept\_id;**

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

| sum(salery) |

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

| 6000 |

| 18000 |

| 17000 |

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

2. select dept\_id and sum of salary where salary is greater than 17000 and group by dept\_id.

**mysql> select dept\_id, sum(salery) from employee1 where salery>7000 group by dept\_id;**

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

| dept\_id | sum(salery) |

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

| 1 | 8000 |

| 2 | 17000 |

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

**mysql> select dept\_id, sum(salery) from employee1 where salery>17000 group by dept\_id;**

Empty set

\*\*\*\*\*\*\*\*\*having

1. select dept\_id and sum of salary where sum of salary is greater than 18000 and group by dept\_id.

**mysql> select dept\_id, sum(salery) from employee1 group by dept\_id having sum(salery)>18000;**

Empty set

**mysql> select dept\_id, sum(salery) from employee1 group by dept\_id having sum(salery)>=18000;**

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

| dept\_id | sum(salery) |

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

| 1 | 18000 |

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

2. select dept\_id and sum of salary where sum of salary is less than 20000 and group by dept\_id.

**mysql> select dept\_id, sum(salery) from employee1 group by dept\_id having sum(salery)<20000;**

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

| dept\_id | sum(salery) |

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

| NULL | 6000 |

| 1 | 18000 |

| 2 | 17000 |

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