07/07/2020 **DBMS Lab** Sanjay Rawat(7341)

**Assignment No. 4 (All types of Join, Sub-Query and View)**

Title: Design at least 10 SQL queries for suitable database application using SQL DML statements: all types of Join, Sub-Query and View

**Tables:**

Pack\_grades(grade\_id,grade\_name,min\_price,max\_price)

Packages(pack\_id,speed,strt\_date,monthly\_payment,sector\_id)

Customers(cust\_id,firstname,lastname,birthdate,joindate,city,state,street,main\_phone\_num,secondary\_phn\_no,fax,monthly\_discount,pack\_id)

Sectors(sector\_id,sector\_name)

**Foreign Key Syntax:**

## CREATE TABLE TABLENAME (

COLUMN\_LIST, PRIMARY KEY (COL NAME),  
 FOREIGN KEY (COL NAME FROM SAME TABLE) REFERENCES REF\_TABLE NAME(COL NAME FROM REF\_TABLE));

mysql> CREATE TABLE PACK\_GRADES(

-> Grade\_ID int PRIMARY KEY,

-> Grade\_Name varchar(30),

-> Min\_Price int,

-> Max\_Price int

-> );

Query OK, 0 rows affected (1.85 sec)

mysql> CREATE TABLE PACKAGES(

-> Pack\_ID int PRIMARY KEY,

-> Speed int,

-> Start\_Date date,

-> Monthly\_Payment int,

-> Sector\_ID int

-> );

Query OK, 0 rows affected (0.52 sec)

mysql> CREATE TABLE CUSTOMERS(

-> Cust\_ID int PRIMARY KEY,

-> FirstName varchar(30),

-> LastName varchar(30),

-> BirthDate date,

-> JoinDate date,

-> City varchar(30),

-> State varchar(30),

-> Street varchar(30),

-> Phone\_Num varchar(12),

-> Monthly\_Discount int,

-> Pack\_ID int

-> );

Query OK, 0 rows affected (1.80 sec)

mysql> CREATE TABLE SECTORS(

-> Sector\_ID int PRIMARY KEY,

-> Sector\_Name varchar(30)

-> );

Query OK, 0 rows affected (0.48 sec)

mysql> ALTER TABLE CUSTOMERS add FOREIGN KEY(Pack\_ID) REFERENCES PACKAGES(Pack\_ID);

Query OK, 0 rows affected (2.37 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc CUSTOMERS;

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

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

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

| Cust\_ID | int | NO | PRI | NULL | |

| FirstName | varchar(30) | YES | | NULL | |

| LastName | varchar(30) | YES | | NULL | |

| BirthDate | date | YES | | NULL | |

| JoinDate | date | YES | | NULL | |

| City | varchar(30) | YES | | NULL | |

| State | varchar(30) | YES | | NULL | |

| Street | varchar(30) | YES | | NULL | |

| Phone\_Num | varchar(12) | YES | | NULL | |

| Monthly\_Discount | int | YES | | NULL | |

| Pack\_ID | int | YES | MUL | NULL | |

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

11 rows in set (0.08 sec)

mysql> ALTER TABLE PACKAGES add FOREIGN KEY(Sector\_ID) REFERENCES SECTORS(Sector\_ID);

Query OK, 0 rows affected (1.97 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc PACKAGES;

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

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

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

| Pack\_ID | int | NO | PRI | NULL | |

| Speed | int | YES | | NULL | |

| Start\_Date | date | YES | | NULL | |

| Monthly\_Payment | int | YES | | NULL | |

| Sector\_ID | int | YES | MUL | NULL | |

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

5 rows in set (0.00 sec)

mysql> INSERT INTO PACK\_GRADES(Grade\_ID,Grade\_Name,Min\_Price,Max\_Price) values

-> (101,'Health',5000,10000),

-> (111,'Education',3000,15000),

-> (104,'Automobiles',12000,30000),

-> (112,'Shopping',1000,50000)

-> ;

Query OK, 4 rows affected (0.15 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM PACK\_GRADES;

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

| Grade\_ID | Grade\_Name | Min\_Price | Max\_Price |

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

| 101 | Health | 5000 | 10000 |

| 104 | Automobiles | 12000 | 30000 |

| 111 | Education | 3000 | 15000 |

| 112 | Shopping | 1000 | 50000 |

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

4 rows in set (0.00 sec)

mysql> INSERT INTO SECTORS(Sector\_ID,Sector\_Name) VALUES

-> (1001,'A -Sector'),

-> (1002,'B -Sector'),

-> (1003,'C -Sector'),

-> (1004,'D -Sector')

-> ;

Query OK, 4 rows affected (0.13 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM SECTORS;

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

| Sector\_ID | Sector\_Name |

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

| 1001 | A -Sector |

| 1002 | B -Sector |

| 1003 | C -Sector |

| 1004 | D -Sector |

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

4 rows in set (0.00 sec)

mysql> INSERT INTO PACKAGES(Pack\_ID,Speed,Start\_Date,Monthly\_Payment,Sector\_ID) VALUES

-> (1,12,"2020-02-03",20000,1001),

-> (2,12,"2019-12-31",11000,1003),

-> (3,14,"2019-03-01",17000,1002),

-> (4,10,"2018-09-12",37000,1004),

-> (5,17,"2015-10-21",7000,1003),

-> (6,20,"2017-11-09",47000,1002),

-> (7,22,"2117-01-19",27000,1001),

-> (8,17,"1997-11-01",30000,1004)

-> ;

Query OK, 8 rows affected (0.14 sec)

Records: 8 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM PACKAGES;

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

| Pack\_ID | Speed | Start\_Date | Monthly\_Payment | Sector\_ID |

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

| 1 | 12 | 2020-02-03 | 20000 | 1001 |

| 2 | 12 | 2019-12-31 | 11000 | 1003 |

| 3 | 14 | 2019-03-01 | 17000 | 1002 |

| 4 | 10 | 2018-09-12 | 37000 | 1004 |

| 5 | 17 | 2015-10-21 | 7000 | 1003 |

| 6 | 20 | 2017-11-09 | 47000 | 1002 |

| 7 | 22 | 2117-01-19 | 27000 | 1001 |

| 8 | 17 | 1997-11-01 | 30000 | 1004 |

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

8 rows in set (0.00 sec)

mysql> INSERT INTO CUSTOMERS(Cust\_ID,FirstName,LastName,BirthDate,JoinDate,City,State,Street,Phone\_Num,Monthly\_Discount,Pack\_ID) VALUES

-> (10,'Anish','Rawat',"2000-03-06","2018-02-17",'PUNE','MAHARASHTRA','DIGHI','8939281280',2000,1),

-> (20,'Golu','Negi',"1993-05-16","2014-12-07",'DEHRADUN','UTTRAKHAND','MAJRA','9192954580',1000,2),

-> (30,'Aman','Bisht',"2001-11-21","2020-05-14",'LUCKNOW','U.P','V.Enclave','9194435580',4000,3),

-> (40,'Atul','Rawat',"1996-01-11","2010-09-04",'DELHI','DELHI','DAWARKA','3794435680',1500,4),

-> (50,'Amit','Rana',"1997-07-17","2013-06-10",'KETHAL','HARYANA','DANGI','3794936580',6000,5),

-> (60,'Surya','Gujar',"1993-03-31","2011-11-24",'KOTA','RAJASTHAN','KASHMIRI','3794349280',3000,6),

-> (70,'Sagar','Kumar',"1997-07-17","2013-06-10",'KETHAL','HARYANA','DANGI','3794936580',6000,7),

-> (80,'Satish','Patra',"1997-07-17","2013-06-10",'KETHAL','HARYANA','DANGI','3794936580',16000,8),

-> (90,'Krunal','Patil',"1997-07-17","2013-06-10",'KETHAL','HARYANA','DANGI','3794936580',3000,1),

-> (100,'Arun','K',"1997-07-17","2013-06-10",'KETHAL','HARYANA','DANGI','3794936580',100,2)

-> ;

Query OK, 10 rows affected (0.19 sec)

Records: 10 Duplicates: 0 Warnings: 0

mysql> SELECT \* FROM CUSTOMERS;

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

| Cust\_ID | FirstName | LastName | BirthDate | JoinDate | City | State | Street | Phone\_Num | Monthly\_Discount | Pack\_ID |

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

| 10 | Anish | Rawat | 2000-03-06 | 2018-02-17 | PUNE | MAHARASHTRA | DIGHI | 8939281280 | 2000 | 1 |

| 20 | Golu | Negi | 1993-05-16 | 2014-12-07 | DEHRADUN | UTTRAKHAND | MAJRA | 9192954580 | 1000 | 2 |

| 30 | Aman | Bisht | 2001-11-21 | 2020-05-14 | LUCKNOW | U.P | V.Enclave | 9194435580 | 4000 | 3 |

| 40 | Atul | Rawat | 1996-01-11 | 2010-09-04 | DELHI | DELHI | DAWARKA | 3794435680 | 1500 | 4 |

| 50 | Amit | Rana | 1997-07-17 | 2013-06-10 | KETHAL | HARYANA | DANGI | 3794936580 | 6000 | 5 |

| 60 | Surya | Gujar | 1993-03-31 | 2011-11-24 | KOTA | RAJASTHAN | KASHMIRI | 3794349280 | 3000 | 6 |

| 70 | Sagar | Kumar | 1997-07-17 | 2013-06-10 | KETHAL | HARYANA | DANGI | 3794936580 | 6000 | 7 |

| 80 | Satish | Patra | 1997-07-17 | 2013-06-10 | KETHAL | HARYANA | DANGI | 3794936580 | 16000 | 8 |

| 90 | Krunal | Patil | 1997-07-17 | 2013-06-10 | KETHAL | HARYANA | DANGI | 3794936580 | 3000 | 1 |

| 100 | Arun | K | 1997-07-17 | 2013-06-10 | KETHAL | HARYANA | DANGI | 3794936580 | 100 | 2 |

| 110 | Ayush | P | 1996-01-11 | 2010-09-04 | DELHI | DELHI | DAWARKA | 3794435680 | 1500 | NULL |

| 120 | Aman | Singh | 1996-01-11 | 2010-09-04 | DELHI | DELHI | DAWARKA | 3794435680 | 1500 | NULL |

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

12 rows in set (0.00 sec)

**Inner JOIN**

1. Customers and internet packages (*Customers* & *Packages* tables) –
   1. Write a query to display first name, last name, package number and internet speed for all customers.

mysql> SELECT c.FirstName,c.LastName,p.Pack\_ID,p.Speed FROM CUSTOMERS as c inner join PACKAGES as p on c.Pack\_id=p.Pack\_ID;

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

| FirstName | LastName | Pack\_ID | Speed |

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

| Anish | Rawat | 1 | 12 |

| Krunal | Patil | 1 | 12 |

| Golu | Negi | 2 | 12 |

| Arun | K | 2 | 12 |

| Aman | Bisht | 3 | 14 |

| Atul | Rawat | 4 | 10 |

| Amit | Rana | 5 | 17 |

| Surya | Gujar | 6 | 20 |

| Sagar | Kumar | 7 | 22 |

| Satish | Patra | 8 | 17 |

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

10 rows in set (0.00 sec)

* 1. Write a query to display first name, last name, package number and internet speed for all customers whose package number equals 22 or 27. Order the query in ascending order by last name.

mysql> SELECT c.FirstName,c.LastName,p.Pack\_ID,p.Speed FROM CUSTOMERS as c inner join PACKAGES as p on c.Pack\_ID=p.Pack\_ID WHERE p.Pack\_ID in(1,3,6) ORDER BY c.LastName ASC;

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

| FirstName | LastName | Pack\_ID | Speed |

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

| Aman | Bisht | 3 | 14 |

| Surya | Gujar | 6 | 20 |

| Krunal | Patil | 1 | 12 |

| Anish | Rawat | 1 | 12 |

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

4 rows in set (0.00 sec)

1. Internet packages and sectors –
   1. Display the package number, internet speed, monthly payment and sector name for all packages (*Packages* and *Sectors* tables).

mysql> SELECT p.Pack\_ID,p.Speed,p.Monthly\_Payment,s.Sector\_Name FROM PACKAGES as p inner join SECTORS as s on p.Sector\_ID=s.Sector\_ID;

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

| Pack\_ID | Speed | Monthly\_Payment | Sector\_Name |

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

| 1 | 12 | 20000 | A -Sector |

| 7 | 22 | 27000 | A -Sector |

| 3 | 14 | 17000 | B -Sector |

| 6 | 20 | 47000 | B -Sector |

| 2 | 12 | 11000 | C -Sector |

| 5 | 17 | 7000 | C -Sector |

| 4 | 10 | 37000 | D -Sector |

| 8 | 17 | 30000 | D -Sector |

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

8 rows in set (0.00 sec)

* 1. Display the customer name, package number, internet speed, monthly payment and sector name for all customers (*Customers*, *Packages* and *Sectors* tables).

mysql> SELECT c.FirstName,c.LastName,c.Pack\_ID,p.Speed,p.Monthly\_Payment,s.Sector\_Name FROM CUSTOMERS as c inner join PACKAGES as p on c.Pack\_ID=p.Pack\_ID inner join SECTORS as s on p.Sector\_ID=s.Sector\_ID;

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

| FirstName | LastName | Pack\_ID | Speed | Monthly\_Payment | Sector\_Name |

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

| Anish | Rawat | 1 | 12 | 20000 | A -Sector |

| Krunal | Patil | 1 | 12 | 20000 | A -Sector |

| Sagar | Kumar | 7 | 22 | 27000 | A -Sector |

| Aman | Bisht | 3 | 14 | 17000 | B -Sector |

| Surya | Gujar | 6 | 20 | 47000 | B -Sector |

| Golu | Negi | 2 | 12 | 11000 | C -Sector |

| Arun | K | 2 | 12 | 11000 | C -Sector |

| Amit | Rana | 5 | 17 | 7000 | C -Sector |

| Atul | Rawat | 4 | 10 | 37000 | D -Sector |

| Satish | Patra | 8 | 17 | 30000 | D -Sector |

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

10 rows in set (0.00 sec)

* 1. Display the customer name, package number, internet speed, monthly payment and sector name for all customers in the business sector (*Customers*, *Packages* and *Sectors* tables).

mysql> SELECT c.FirstName,c.LastName,c.Pack\_ID,p.Speed,p.Monthly\_Payment,s.Sector\_Name

-> FROM CUSTOMERS as c

-> inner join PACKAGES as p

-> on c.Pack\_ID=p.Pack\_ID

-> inner join SECTORS as s

-> on p.Sector\_ID=s.Sector\_ID

-> WHERE s.Sector\_Name ='B-Sector';

Empty set (0.00 sec)

1. Display the last name, first name, join date, package number, internet speed and sector name for all customers in the private sector who joined the company in the year 2006.

mysql> SELECT c.FirstName,c.LastName,c.Pack\_ID,p.Speed,p.Monthly\_Payment,s.Sector\_Name FROM CUSTOMERS as c inner join PACKAGES as p on c.Pack\_ID=p.Pack\_ID inner join SECTORS as s on p.Sector\_ID=s.Sector\_ID

-> WHERE c.JoinDate like '2006%';

Empty set (0.00 sec)

mysql> SELECT c.FirstName,c.LastName,c.Pack\_ID,p.Speed,p.Monthly\_Payment,s.Sector\_Name FROM CUSTOMERS as c inner join PACKAGES as p on c.Pack\_ID=p.Pack\_ID inner join SECTORS as s on p.Sector\_ID=s.Sector\_ID

-> WHERE c.JoinDate like '2010%';

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

| FirstName | LastName | Pack\_ID | Speed | Monthly\_Payment | Sector\_Name |

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

| Atul | Rawat | 4 | 10 | 37000 | D -Sector |

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

1 row in set (0.00 sec)

**Non Equi Join**

1. Display the package number, internet speed, monthly payment and package grade for all packages whose monthly payment is between min\_price and max\_price(*Packages* and *Pack\_Grades* tables).

mysql> SELECT p.Pack\_ID,p.Speed,p.Monthly\_Payment,g.Grade\_Name

-> FROM PACKAGES as p,PACK\_GRADES as g

-> WHERE p.Monthly\_Payment BETWEEN g.Min\_Price AND g.Max\_Price;

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

| Pack\_ID | Speed | Monthly\_Payment | Grade\_Name |

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

| 1 | 12 | 20000 | Automobiles |

| 1 | 12 | 20000 | Shopping |

| 2 | 12 | 11000 | Education |

| 2 | 12 | 11000 | Shopping |

| 3 | 14 | 17000 | Automobiles |

| 3 | 14 | 17000 | Shopping |

| 4 | 10 | 37000 | Shopping |

| 5 | 17 | 7000 | Health |

| 5 | 17 | 7000 | Education |

| 5 | 17 | 7000 | Shopping |

| 6 | 20 | 47000 | Shopping |

| 7 | 22 | 27000 | Automobiles |

| 7 | 22 | 27000 | Shopping |

| 8 | 17 | 30000 | Automobiles |

| 8 | 17 | 30000 | Shopping |

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

15 rows in set (0.00 sec)

**Outer Join**

* 1. Customers and internet packages (*Customers* and *Packages* tables)
     1. Display the first name, last name, internet speed and monthly payment for all customers. Use INNER JOIN to solve this exercise.

mysql> SELECT c.FirstName,c.LastName,p.Speed,p.Monthly\_Payment

-> FROM CUSTOMERS as c

-> INNER JOIN PACKAGES as p

-> on c.Pack\_ID=p.Pack\_ID;

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

| FirstName | LastName | Speed | Monthly\_Payment |

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

| Anish | Rawat | 12 | 20000 |

| Krunal | Patil | 12 | 20000 |

| Golu | Negi | 12 | 11000 |

| Arun | K | 12 | 11000 |

| Aman | Bisht | 14 | 17000 |

| Atul | Rawat | 10 | 37000 |

| Amit | Rana | 17 | 7000 |

| Surya | Gujar | 20 | 47000 |

| Sagar | Kumar | 22 | 27000 |

| Satish | Patra | 17 | 30000 |

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

10 rows in set (0.00 sec)

* + 1. Modify last query to display all customers, including those without any internet package.

mysql> SELECT c.FirstName,c.LastName,p.Speed,p.Monthly\_Payment

-> FROM CUSTOMERS as c

-> LEFT OUTER JOIN PACKAGES as p

-> on c.Pack\_ID=p.Pack\_ID;

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

| FirstName | LastName | Speed | Monthly\_Payment |

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

| Anish | Rawat | 12 | 20000 |

| Golu | Negi | 12 | 11000 |

| Aman | Bisht | 14 | 17000 |

| Atul | Rawat | 10 | 37000 |

| Amit | Rana | 17 | 7000 |

| Surya | Gujar | 20 | 47000 |

| Sagar | Kumar | 22 | 27000 |

| Satish | Patra | 17 | 30000 |

| Krunal | Patil | 12 | 20000 |

| Arun | K | 12 | 11000 |

| Ayush | P | NULL | NULL |

| Aman | Singh | NULL | NULL |

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

12 rows in set (0.00 sec)

* + 1. Modify last query to display all packages, including those without any customers.

\ mysql> SELECT c.FirstName,c.LastName,p.Speed,p.Monthly\_Payment

-> FROM CUSTOMERS as c

-> RIGHT OUTER JOIN PACKAGES as p

-> on c.Pack\_ID=p.Pack\_ID;

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

| FirstName | LastName | Speed | Monthly\_Payment |

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

| Anish | Rawat | 12 | 20000 |

| Krunal | Patil | 12 | 20000 |

| Golu | Negi | 12 | 11000 |

| Arun | K | 12 | 11000 |

| Aman | Bisht | 14 | 17000 |

| Atul | Rawat | 10 | 37000 |

| Amit | Rana | 17 | 7000 |

| Surya | Gujar | 20 | 47000 |

| Sagar | Kumar | 22 | 27000 |

| Satish | Patra | 17 | 30000 |

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

10 rows in set (0.00 sec)

* + 1. Modify last query to display all packages and all customers.

mysql> SELECT c.FirstName,c.LastName,p.Speed,p.Monthly\_Payment

-> from CUSTOMERS as c

-> LEFT JOIN Packages as p

-> on c.Pack\_ID=p.Pack\_ID

-> union

-> SELECT c.FirstName,c.LastName,p.Speed,p.Monthly\_Payment

-> from CUSTOMERS as c

-> RIGHT JOIN Packages as p

-> on c.Pack\_ID=p.Pack\_ID

-> ;

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

| FirstName | LastName | Speed | Monthly\_Payment |

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

| Anish | Rawat | 12 | 20000 |

| Golu | Negi | 12 | 11000 |

| Aman | Bisht | 14 | 17000 |

| Atul | Rawat | 10 | 37000 |

| Amit | Rana | 17 | 7000 |

| Surya | Gujar | 20 | 47000 |

| Sagar | Kumar | 22 | 27000 |

| Satish | Patra | 17 | 30000 |

| Krunal | Patil | 12 | 20000 |

| Arun | K | 12 | 11000 |

| Ayush | P | NULL | NULL |

| Aman | Singh | NULL | NULL |

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

12 rows in set (0.04 sec)

**Self Join**

* + 1. Display the last name, first name and package number for all customers who have the same package number as customer named ‘A Taylor’ (*Customers* table).

mysql> SELECT c.FirstName, c.LastName, c.Pack\_ID FROM CUSTOMERS as c join (SELECT Pack\_ID FROM CUSTOMERS WHERE FirstName='Anish' and LastName='Rawat') as c1 on c.Pack\_ID = c1.Pack\_ID;

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

| FirstName | LastName | Pack\_ID |

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

| Anish | Rawat | 1 |

| Krunal | Patil | 1 |

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

2 rows in set (0.00 sec)

* + 1. Display the last name, first name and monthly discount for all customers whose monthly discount is lower than the monthly discount of employee number 103 (*Customers* table).

mysql> select c.LastName, c.FirstName, c.Monthly\_Discount from customers as c join (select Monthly\_Discount from customers where Cust\_ID=30) as c1 on c.Monthly\_Discount < c1.Monthly\_Discount;

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

| LastName | FirstName | Monthly\_Discount |

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

| Rawat | Anish | 2000 |

| Negi | Golu | 1000 |

| Rawat | Atul | 1500 |

| Gujar | Surya | 3000 |

| Patil | Krunal | 3000 |

| K | Arun | 100 |

| P | Ayush | 1500 |

| Singh | Aman | 1500 |

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

8 rows in set (0.00 sec)

* + 1. Display the package number and internet speed for all packages whose internet speed is equal to the internet speed of package number 10 (*Packages* table).

mysql> select p1.pack\_id, p1.speed from packages as p1 join (select speed from packages where pack\_id=1) as p2 on p1.speed = p2.speed;

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

| pack\_id | speed |

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

| 1 | 12 |

| 2 | 12 |

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

2 rows in set (0.00 sec)