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/***********************************Class :-XII A	**********
/*************************Date :-15 November 2014	***********
/*****************************Q-21) :-SQL Queries	***************
/******************	**********

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

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

Your MySQL connection id is 31

Server version: 5.6.14 MySQL Community Server (GPL)

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

mysql> USE Filework
Database changed

	Querry	1
--	--------	---

=> To create the following three tables.

		Table-Employee
Feild name	Type	Constraint
Eno	integer	Primary key
Fname	char(20)	Not null
Lname	char(20)	Not null
Design	char(20)	Only mgr,smgr,clerk and superviser allowed
Deptno	integer	Not null
Sal	integer	Only between 5000 and 25000 allowed
Gender	char(2)	Not null and only 'M' and 'F' alllowed
Dob	date	
Doj	date	Check Doj>Dob

Table-dept			
Feild name	Type	Constraint	
Dno	integer	Primary key	
Dname	char(20)	Unique	
Loc	char(20)	Not null	

.....

		Table-Sal grade
Feild name	Type	Constraint
Grade	integer	Primary key,grade between 1 to 5
Up_limit	integer	Not null, between 5000 and 25000 allowed
Lo_limit	integer	Not null, between 5000 and 25000 allowed

mysql> CREATE TABLE Employee -> (-> Eno integer NOT NULL PRIMARY KEY, -> Fname char(20) NOT NULL, -> Lname char(20) NOT NULL, \rightarrow Design char(20), -> CHECK (Design IN ('mgr', 'smgr', 'clerk', 'superviser')), -> Deptno integer NOT NULL, integer, -> Sal -> CHECK (Sal BETWEEN 5000 and 25000), -> Gender char(2) NOT NULL, -> CHECK (Gender IN ('M','F')), -> Dob DATE, DATE, -> Doj -> CHECK (Doj > Dob) ->); Query OK, 0 rows affected (0.45 sec) mysql> CREATE TABLE dept -> (-> Dno integer NOT NULL PRIMARY KEY, -> Dname char(20) NOT NULL UNIQUE, -> Loc char(20) NOT NULL ->); Query OK, 0 rows affected (0.47 sec) mysql> CREATE TABLE Sal --Sal grade named as Sal as space not allowed -> (integer NOT NULL PRIMARY KEY, -> Grade -> CHECK (Grade BETWEEN 1 and 5), -> Up_limit integer NOT NULL, -> CHECK (Up limit BETWEEN 5000 and 25000), -> Lo limit integer NOT NULL, -> CHECK (Lo limit BETWEEN 5000 and 25000) ->); Query OK, 0 rows affected (0.38 sec)

Field Type	mysql> DE	SC Employee	;	.		·
Fname char(20) NO	Field	Туре	Null	Кеу	Default	Extra
i Doj i date - i YES i - i NULL - i - i	Fname Lname Design Deptno Sal Gender Dob	char(20) char(20) char(20) int(11) int(11) char(2) date	NO NO YES NO YES NO NO NO		NULL NULL NULL NULL NULL NULL	

Field	Туре	Null	Кеу	Default	Extra
Dname !	int(11) char(20) char(20)	l NO	UNI	NULL	

Field	Туре	Nu11	Кеу	Default	Extra
Up_limit	int(11) int(11) int(11)	NO		NULL	

.....

------ Querry 2 ------

=> To insert records in above three tables.

mysql> INSERT INTO Employee VALUES(1000,'Abhishek','Garg','Clerk',2000,5500,'M', -> "12-12-1985","10-11-2005");

ERROR 1292 (22007): Incorrect date value: '12-12-1985' for column 'Dob' at row 1

```
nysql> SELECT NOW();
     NOW()
     2014-11-15 18:40:50
     row in set (0.00 sec)
   mysql> SELECT SYSDATE();
     SYSDATE()
     2014-11-15 18:41:02
     row in set (0.00 sec)
mysql> INSERT INTO Employee VALUES(1000, 'Abhishek', 'Garg', 'Clerk', 2000, 5500, 'M',
  -> "1985-12-12","2005-11-10");
Query OK, 1 row affected (0.13 sec)
mysql> INSERT INTO Employee VALUES(1001, 'Prachi', 'Goyel', 'Clerk', 2000, 5200, 'F',
  -> "1986-11-10","2008-10-05");
Query OK, 1 row affected (0.09 sec)
mysql> INSERT INTO Employee VALUES(1003, 'Simran', 'Dua', 'Clerk', 2000, 5300, 'F',
  -> "1983-05-07","2007-07-10");
Query OK, 1 row affected (0.05 sec)
mysql> INSERT INTO Employee VALUES(1004, 'Risika', 'Pal', 'Mgr', 2000, 21000, 'F',
  -> "1980-01-14","2001-01-13");
Query OK, 1 row affected (0.06 sec)
mysql> INSERT INTO Employee VALUES(1005, 'Mohit', 'Batra', 'Smgr', 2000, 25000, 'M',
  -> "1947-08-15","1975-05-11");
Query OK, 1 row affected (0.08 sec)
mysql> INSERT INTO Employee VALUES(1006, 'Sonal', 'Gupta', 'Superviser', 2000, 25000,
  -> 'F',"1949-12-03","1975-09-13");
Query OK, 1 row affected (0.05 sec)
mysql> INSERT INTO Employee VALUES(1007, 'Divesh', 'Uttam', 'Superviser', 3000,
  -> 25000,'M',"1996-09-27","2012-11-04");
Query OK, 1 row affected (0.09 sec)
mysql> INSERT INTO Employee VALUES(1008, 'Harsh', 'Uttam', 'Mgr', 3000, 24000, 'M',
  -> "1998-01-30","2012-11-04");
Query OK, 1 row affected (0.06 sec)
mysql> INSERT INTO Employee VALUES(1009, 'Harshil', 'Mathur', 'Clerk', 3000, 6000,
  -> 'M',"1997-05-05","2013-09-06");
Query OK, 1 row affected (0.05 sec)
```

```
mysql> INSERT INTO Dept Values(2000, 'Sales', NULL);
ERROR 1048 (23000): Column 'Loc' cannot be null
                                                     --NOT NULL constraint
mysql> INSERT INTO Dept Values(2000, 'Sales', 'Delhi');
Query OK, 1 row affected (0.08 sec)
mysql> INSERT INTO Dept Values(3000, 'Purchase', 'Jodhpur');
Query OK, 1 row affected (0.05 sec)
mysql> INSERT INTO Sal Values(1,25000,20000);
Query OK, 1 row affected (0.06 sec)
mysql> INSERT INTO Sal Values(2,20000,15000);
Query OK, 1 row affected (0.08 sec)
mysql> INSERT INTO Sal Values(3,15000,10000);
Query OK, 1 row affected (0.05 sec)
mysql> INSERT INTO Sal Values(3,10000,150000);
ERROR 1062 (23000): Duplicate entry '3' for key 'PRIMARY'
                                                   -- PRIMARY KEY Constraint
mysql> INSERT INTO Sal Values(4,10000,5000);
```

Eno	! Fname	Design	Deptno	Sal	Dob	Doj
1000	Abhishek	Clerk	2000	: 5500	1985-12-12	2005-11-10
1001	l Prachi	l Clerk	1 2000	: 5200 l	1986-11-10	2008-10-05
1003	¦ Simran	l Clerk	1 2000	: 5300 ¦	1983-05-07	2007-07-10
1004	¦ Risika	Mgr	2000	: 21000	1980-01-14	2001-01-13
1005	! Mohit	! Smgr	1 2000	1 25000 1	1947-08-15	1975-05-11
1006	¦ Sonal	Superviser	2000	: 25000	1949-12-03	1975-09-13
1007		Superviser	1 3000	1 25000	1996-09-27	2012-11-04
1008	l Harsh	! Mgr	1 3000	1 24000 1	1998-01-30	2012-11-04
1009	Harshil	l Clerk	1 3000	6000	1997-05-05	2013-09-06

ysq1>	SELECT * FRO	OM Dept;	
Dno	Dname	Loc	
	Sales Purchase		
2 rows	in set (0.00	sec)	

Query OK, 1 row affected (0.05 sec)

Grade	Up_limit	Lo_limit	į
1	25000	20000	Ï
2	: 20000	15000	ı
3	15000	10000	
4	10000	5000	

```
------ Querry 3 ------
=>
     To display total number of female managers.
  nysq1> SELECT COUNT(*) FROM Employee
-> WHERE Gender='F' and Design='Mgr';
   COUNT(*) !
   row in set (0.04 sec)
------ Querry 4 ------
=>
     To display total number of male managers drawing salaries more than ₹ 20000.
 mysql> SELECT COUNT(*) FROM Employee
-> WHERE Gender='M' and Design='Mgr' and Sal>20000;
   COUNT(*)
   row in set (0.00 sec)
------ Querry 5 ------
```

=> To display employee number,name and department of all clerks whose salary is between 5000 and 7000.

Querry 6
=> To display department number wise number of employees for only those departments where number of employees is less than 5.
mysql> SELECT Deptno, COUNT(*) FROM Employee -> GROUP BY Deptno -> HAVING COUNT(*)<=5; ++ ! Deptno ! COUNT(*) !
+++ 3000 3 ++
1 row in set (0.00 sec)
Querry 7
Querry /
=> To display department number wise minimum, maximum and total salary.
mysql> SELECT Deptno, MIN(Sal), MAX(SAL), SUM(Sal) -> FROM Employee -> GROUP BY Deptno;
Deptno MIN(Sal) MAX(SAL) SUM(Sal)
2000 5200 25000 87000 3000 6000 25000 55000
2 rows in set (0.05 sec)
Querry 8
=> To display employee names and there genders whose name starts with 'A' or ends with 'A'.
mysql> SELECT Fname, Lname, Gender -> FROM Employee -> WHERE Fname LIKE 'xA' or Fname Like 'Ax';
Fname Lname Gender
++++ Abhishek
r nisika

------ Querry 9 ------

=> To display employee number and last name given the heading as 'Name' of only male clerks.

------ Querry 10 -----

=> To display employee number, first name, design, dept name and grade of all male supervisors.

------ Querry 11 ------

=> To increase the salary of all clerks with 10% whose salary is less than 6000.

```
mysql> Select Fname, Design ,Sal From Employee;
            | Design
                           : Sal
 Fname
              Clerk
Clerk
 Abhishek
  Prachi
 Simran
Risika
              Clerk
              Smgr
                             25000
  Mohit
              Superviser
                             25000
              Superviser
                             24000
  Harsh
  Harshil
                              6000
  rows in set (0.00 sec)
```

mysql> UPDATE Employee

- -> SET Sal=Sal+0.1*Sal
- -> WHERE Design='Clerk' and Sal<6000;

Query OK, 3 rows affected (0.05 sec)

Rows matched: 3 Changed: 3 Warnings: 0

mysql> Select Fname, Design ,Sal From Employee;						
: Fname	Design	Sal				
Abhishek		6050				
¦ Prachi ¦ Simran		: 5720 : : 5830 :				
		: 21000 :				
		25000 :				
	Superviser Superviser					
l Harsh	l Mgr	: 24000 :				
Harshil	Clerk	6000				
9 rows in set (0.00 sec)						

------ Querry 12 ------

=> To add a new column to table employee-experience-int-not null.

mysql> ALTER TABLE Employee

-> ADD Experience integer NOT NULL;

Query OK, 0 rows affected (0.80 sec)

Records: 0 Duplicates: 0 Warnings: 0

Field	Туре	į	Null	l Key	l	Default	Extra
Eno	int(11)		NO	PRI	Ī	NULL	; ;
Fname	char(20)	ı	NO	!	ł	NULL	: :
Lname	char(20)	ł	NO	:	ł	NULL	: :
Design	char(20)	ı	YES	!	ł	NULL	: :
Deptno	! int(11)	ı	NO	!	ł	NULL	: :
SaÎ	! int(11)	ł	YES	:	ł	NULL	: :
Gender	char(2)	H	NO	:	ı	NULL	: :
Dob	date	ı	YES	!	ł	NULL	: :
Doj	date		YES	!	ł	NULL	: :
Experience	int(11)	-	NO	:	ł	NULL	: :

------ Querry 13 ------

=> To display all employee details whose date of joining is after 3rd Jan. 2008.

mysql> SELECT * FROM Employee WHERE Doj > '2008-01-03';

++	Lname	Design	Deptno	Sal	Gender	Dob	Doj	Experience
1001 Prachi 1007 Divesh 1008 Harsh 1009 Harshil	Goyel Uttam Uttam Mathur	Clerk Superviser Mgr Clerk	2000 3000 3000 3000	5720 25000 24000 6000	F M M M	1986-11-10 1996-09-27 1998-01-30 1997-05-05	2008-10-05 2012-11-04 2012-11-04 2013-09-06	0 0 0 0
4 rows in set (0	•		T======			- VISUAL TA		

------ Querry 14 ------

=> To delete all employees whose date of birth is before 1st Jan 1951.

mysql> DELETE FROM Employee WHERE Dob < '1951-01-01'; Query OK, 2 rows affected (0.06 sec)

------ Querry 15 -----

=> To create a new table as 'purchase' which contains details of all employees who belong to purchase department. Also add the records of all the employees from the employees table to purchase table who belong to purchase department.

-> (

-> SELECT * FROM Employee WHERE Deptno=3000

->).

Query OK, 3 rows affected (0.64 sec) Records: 3 Duplicates: 0 Warnings: 0

```
SELECT Fname, Deptno, Dname FROM Purchase, Dept WHERE Deptno=Dno;
nysq1>
 Fname
            Deptno !
                     Dname
 Divesh
              3000
                     Purchase
                     Purchase
              3000
 Harsh
              3000
                     Purchase
 Harshil
 rows in set (0.00
                    sec)
```

------ Querry 16 ------

=> To display alphabetical list of all the employees ordered by first name then by last name.

```
SELECT Eno, Fname, Lname FROM Employee ORDER BY Fname, Lname;
         Fname
                      Lname
Eno
1000
         Abhishek
                        Garg
         Divesh
Harsh
1007
1008
                        Uttam
                        Uttam
         Harshil
1009
                        Mathur
                        Goyel
Pal
         Prachi
                        Dua
          set (0.01 sec)
```

------ Querry 17 -----

To display employee number, first name and dept number of all the senior managers ordered by their salaries in descending order.

mysql> SELECT Eno, Fname, Deptno FROM Employee WHERE Design='Smgr' -> ORDER BY Sal Desc;

Empty set (0.00 sec)

------ Querry 18 ------

To display employee number, designation, monthly salary and annual salary of all the => employees. Give proper headings to each column.

```
mysql> SELECT Eno AS 'Employee Number',

-> Design AS Designation,

-> Sal AS 'Monthly Sal',

-> Sal*12 AS 'Annual Sal'

-> FROM Employee;
   Employee Number | Designation | Monthly Sal |
                                                                                   Annual Sal
                                   Clerk
Clerk
Clerk
                       1000
                                                                        5500
                                                                                             66000
                                   Mgr
Superviser
                                                                                           300000
                                   Mgr
Clerk
                                                                                           288000
                                                                                             72000
   rows in set (0.00 sec)
```

--'Quotes' req. only if more than one word in heading

		Querry 19 -	
=> To display	designation	wise number of male emp	loyees.
mysql> SELECT -> GROUP I -> HAVING ERROR 1054 (42	Design, Co 3y Design Gender='M' 2S22): Unkn	own column 'Gender' i	Employee' FROM Employee In 'having clause' der Not Inclued In List But Used In Having
mysq1> SELECT -> GROUP I -> HAVING	Design, Ge By Design Gender='M'	nder, Count(*) AS 'No ;	of Male Employee' FROM Employee
+		No of Male Employee	
Clerk Superviser	M M	4 1	
2 rows in set			
		Querry 20 -	
=> To display	names of all	designations in the organ	ization.
+		ign From Employee; ec)	
			To Display Only Once Use DISTINCT
		Querry 21 -	
=> To display	zall employe	es who have not been asig	ned calaries
	Fname, Sal I	FROM Employee WHERE	

------ Querry 22 ------

=> To display employee number, designation, salary and grade of all female employee.

------ Querry 23 ------

=> To display employee number, designation, department name and location of all employees.

```
SELECT Eno, Design,
FROM Employee, Dept
WHERE Dno=Deptno;
                                  Dname, Loc
nysql>
 Eno
                                          Loc
          Design
                            Dname
 1000
           Clerk
                            Sales
                                          De lhi
           Clerk
 1001
                            Sales
           Clerk
 1 003
                            Sales
                            Sales
           Mgr
           Superviser
                                          Jodhpur
                            Purchase
                            Purchase
           Mgr
Clerk
                                          Jodhpur
                            Purchase
                                          Jodhpur
        in set (0.00 sec)
```

------ Querry 24 ------

=> To create a view containing employee number, first name, salary and gender of all the managers of account department.

```
mysql> INSERT INTO Employee VALUES(1010,'Gaurav','Dua','Mgr',4000,25000,'M', -> "1985-12-12","2005-11-10",0);
Query OK, 1 row affected (0.09 sec)
```

mysql> INSERT INTO Dept Values(4000,'Accounts','Jaipur'); Query OK, 1 row affected (0.09 sec)

```
mysql> CREATE VIEW AC_Mgr AS
-> (
-> SELECT Eno,Fname,Sal,Gender FROM Employee
-> WHERE Deptno=4000
-> );
Query OK, 0 rows affected (0.11 sec)
```

------ Querry 25 ------

=> To delete all tables and views.



mysql> DROP TABLE AC mgr;

ERROR 1051 (42S02): Unknown table 'filework.ac_mgr'

--AC_mgr is a View Hence doesn't exist as a table

mysql> DROP VIEW AC_mgr; Query OK, 0 rows affected (0.00 sec)

mysql> DROP TABLE dept;

Query OK, 0 rows affected (0.14 sec)

mysql> DROP TABLE employee; Query OK, 0 rows affected (0.14 sec)

mysql> DROP TABLE purchase; Query OK, 0 rows affected (0.11 sec)

mysql> DROP TABLE sal; Query OK, 0 rows affected (0.13 sec)

mysql> SHOW TABLES; Empty set (0.03 sec)
