

Q&A Activity Question Week -13

Create a table as given below in MySQL. And write queries for the given statements.

Employee ID	Name	Gender	Department	Salary	DOB	Date of Joining
CP0123	Ann Mery	F	HR	45000	10/Oct/1989	1/Jan/2018
CP0087	Felix M	M	Finance	48000	12/Apr/1981	10/Dec/2000
CP0197	Merlin	M	CEO	80000	01/Mar/1990	10/May/2011
CP0213	Philip	M	Retail	47000	01/Apr/1991	11/June/2012
CP0243	Michael	M	Retail	40000	01/Dec/1992	30/May/2016
CP0289	Susan	F	Retail	40000	01/Jan/1991	01/Apr/2016
CP0298	Abram	M	Relations	30000	17/Apr/1994	06/Oct/2016
CP0300	Alia	F	Relations	30000	17/Oct/1995	18/Oct/2016
CP0321	Raichal	F	Marketing	34000	09/Oct/1990	22/Oct/2016
CP0276	Thomas	M	Marketing	44000	19/Nov/1983	22/Oct/2018

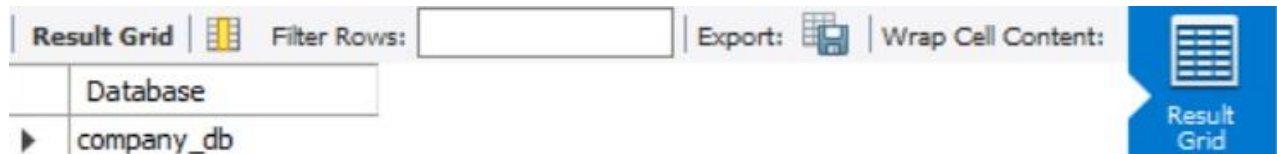
1. Write SQL queries to create the above table.

– Creating a database –

CREATE DATABASE company_db;

– Display the databases –

SHOW DATABASES;



– Selecting a database –

USE company_db;

– creating a table –

```
CREATE TABLE Employees (  
EmployeeID VARCHAR(10) NOT NULL PRIMARY KEY,  
Name VARCHAR(20), Gender CHAR(5) NOT NULL,  
Department VARCHAR(20) NOT NULL, Salary DECIMAL NOT NULL,  
DOB DATE NOT NULL, Date_of_Joining DATE NOT NULL);
```

– Display the Structure of the table –

DESCRIBE Employees;

The screenshot shows a software interface with a 'Result Grid' tab. Below the tab, there is a table showing the structure of the 'Employees' table. The table has columns: Field, Type, Null, Key, Default, and Extra. The rows are: Salary (decimal(10,0), NO, NULL), Name (varchar(20), YES, NULL), Gender (char(5), NO, NULL), EmployeeID (varbinary(10), NO, PRI, NULL), DOB (date, NO, NULL), Department (varchar(20), NO, NULL), and Date_of_Joining (date, NO, NULL). On the right side of the interface, there is a blue button labeled 'Result Grid' and a button labeled 'Form Editor'.

Field	Type	Null	Key	Default	Extra
Salary	decimal(10,0)	NO		NULL	
Name	varchar(20)	YES		NULL	
Gender	char(5)	NO		NULL	
EmployeeID	varbinary(10)	NO	PRI	NULL	
DOB	date	NO		NULL	
Department	varchar(20)	NO		NULL	
Date_of_Joining	date	NO		NULL	

– Insert the values into the table –

```
INSERT INTO Employees(  
EmployeeID, Name, Gender, Department, Salary, DOB, Date_of_Joining) VALUES  
(  
'CP0123', 'Ann Mery', 'F', 'HR', 45000, STR_TO_DATE('10/Oct/1989',  
'%d/%M/%Y'), STR_TO_DATE('1/Jan/2018', '%d/%M/%Y')), (  
'CP0087', 'Felix', 'M', 'Finance', 48000, STR_TO_DATE('12/Apr/1981',  
'%d/%M/%Y'), STR_TO_DATE('10/Dec/2000', '%d/%M/%Y')), (  
'CP0197',
```

```
'Merlin','M','CEO',80000,STR_TO_DATE('01/Mar/1990',
'%d/%M/%Y'),STR_TO_DATE('10/May/2011', '%d/%M/%Y')), ('CP0213',
'Philip','M','Retail',47000,STR_TO_DATE('01/Apr/1991',
'%d/%M/%Y'),STR_TO_DATE('11/June/2012', '%d/%M/%Y')), ('CP0243',
'Michael','M','Retail',40000,STR_TO_DATE('01/Dec/1992',
'%d/%M/%Y'),STR_TO_DATE('30/May/2016', '%d/%M/%Y')), ('CP0289',
'Susan','F','Retail',40000,STR_TO_DATE('01/Jan/1991',
'%d/%M/%Y'),STR_TO_DATE('01/Apr/2016', '%d/%M/%Y')), ('CP0298',
'Abram','M','Relations',30000,STR_TO_DATE('17/Apr/1994',
'%d/%M/%Y'),STR_TO_DATE('06/Oct/2016', '%d/%M/%Y')), ('CP0300',
'Alia','F','Relations',30000,STR_TO_DATE('17/Oct/1995',
'%d/%M/%Y'),STR_TO_DATE('06/Oct/2016', '%d/%M/%Y')), ('CP0321',
'Raichal','F','Marketing',34000,STR_TO_DATE('09/Oct/1990',
'%d/%M/%Y'),STR_TO_DATE('22/Oct/2016', '%d/%M/%Y')), ('CP0276',
'Thomas','M','Marketing',44000,STR_TO_DATE('19/Nov/1983',
'%d/%M/%Y'),STR_TO_DATE('22/Oct/2018', '%d/%M/%Y'));
```

– Display the table all values –
SELECT * FROM Employees;

EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining
CP0087	Felix	M	Finance	48000	1981-04-12	2000-12-10
CP0123	Ann Mery	F	HR	45000	1989-10-10	2018-01-01
CP0197	Merlin	M	CEO	80000	1990-03-01	2011-05-10
CP0213	Philip	M	Retail	47000	1991-04-01	2012-06-11
CP0243	Michael	M	Retail	40000	1992-12-01	2016-05-30
CP0276	Thomas	M	Marketing	44000	1983-11-19	2018-10-22

2. Write SQL queries to select employees from the following departments

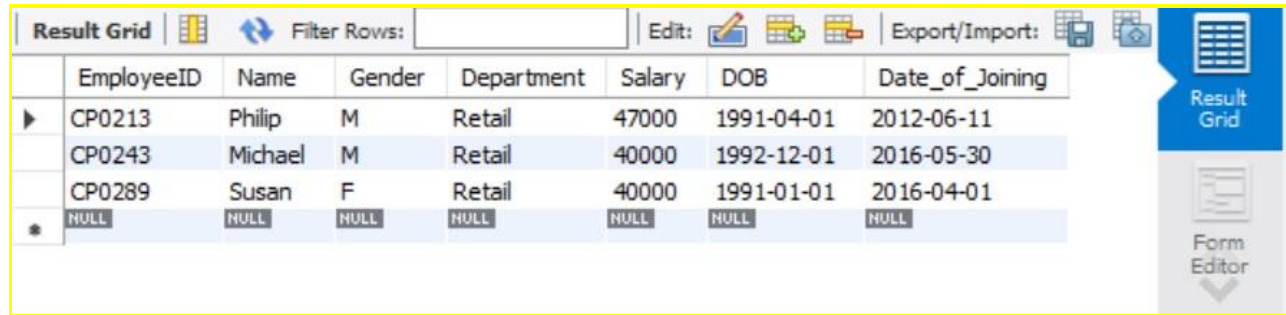
a. Marketing

```
SELECT * FROM Employees WHERE Department = 'Marketing';
```

EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining
CP0276	Thomas	M	Marketing	44000	1983-11-19	2018-10-22
CP0321	Raichal	F	Marketing	34000	1990-10-09	2016-10-22
NULL	NULL	NULL	NULL	NULL	NULL	NULL

b. Retail

```
SELECT * FROM Employees WHERE Department = 'Retail';
```

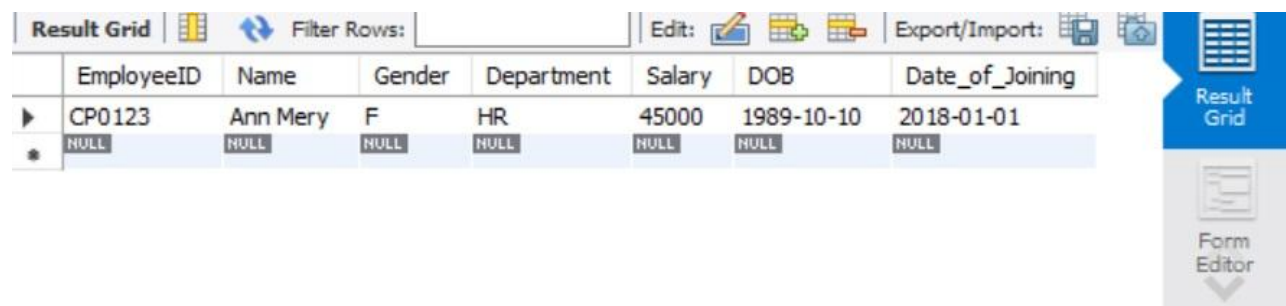


The screenshot shows a database application interface with a 'Result Grid' tab selected. The grid displays the results of a SQL query filtering employees by Department = 'Retail'. The columns are EmployeeID, Name, Gender, Department, Salary, DOB, and Date_of_Joining. There are three data rows and one row with all NULL values. To the right of the grid are buttons for 'Result Grid' and 'Form Editor'.

	EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining
▶	CP0213	Philip	M	Retail	47000	1991-04-01	2012-06-11
	CP0243	Michael	M	Retail	40000	1992-12-01	2016-05-30
	CP0289	Susan	F	Retail	40000	1991-01-01	2016-04-01
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

c. HR

```
SELECT * FROM Employees WHERE Department = 'HR';
```



The screenshot shows a database application interface with a 'Result Grid' tab selected. The grid displays the results of a SQL query filtering employees by Department = 'HR'. The columns are EmployeeID, Name, Gender, Department, Salary, DOB, and Date_of_Joining. There is one data row and one row with all NULL values. To the right of the grid are buttons for 'Result Grid' and 'Form Editor'.

	EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining
▶	CP0123	Ann Mery	F	HR	45000	1989-10-10	2018-01-01
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

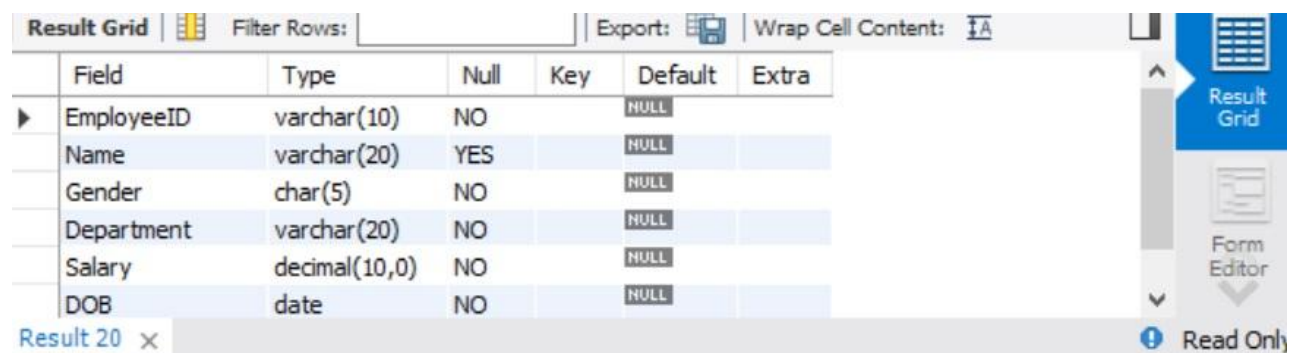
3. Write SQL queries to create a table only containing female employees.

```
CREATE TABLE Female_Employees as
```

```
(SELECT * FROM Employees WHERE Gender = 'F');
```

– Display the Structure of the table –

```
DESCRIBE Female_Employees;
```



The screenshot shows a database application interface with a 'Result Grid' tab selected. The grid displays the structure of the 'Female_Employees' table. The columns are Field, Type, Null, Key, Default, and Extra. The rows show the details for each field: EmployeeID (varchar(10), NO, NULL), Name (varchar(20), YES, NULL), Gender (char(5), NO, NULL), Department (varchar(20), NO, NULL), Salary (decimal(10,0), NO, NULL), and DOB (date, NO, NULL). To the right of the grid are buttons for 'Result Grid' and 'Form Editor'. At the bottom left, it says 'Result 20 x' and at the bottom right, there is a 'Read Only' status.

	Field	Type	Null	Key	Default	Extra
▶	EmployeeID	varchar(10)	NO		NULL	
	Name	varchar(20)	YES		NULL	
	Gender	char(5)	NO		NULL	
	Department	varchar(20)	NO		NULL	
	Salary	decimal(10,0)	NO		NULL	
	DOB	date	NO		NULL	

```
SELECT * FROM Female_Employees ;
```

4. Write SQL queries to display the Maximum, Minimum and Average Salary.

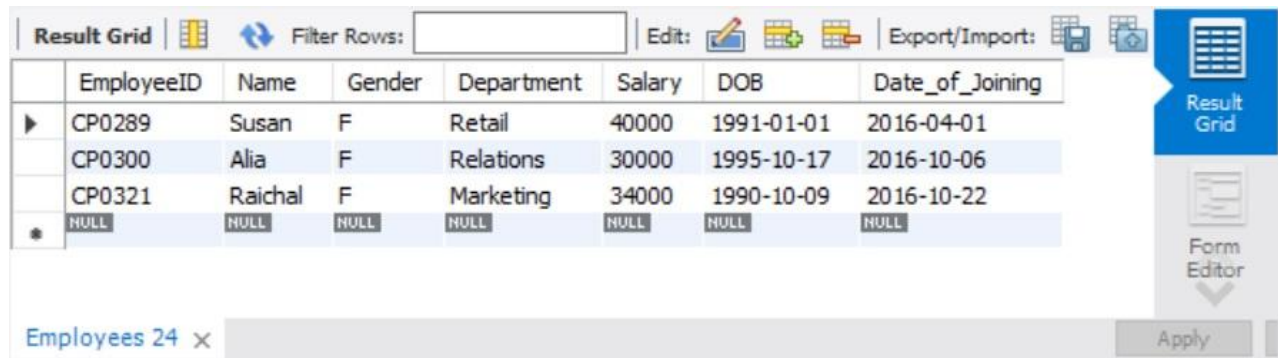
	Maximum_Salary	Minimum_Salary	Average_Salary
▶	80000	30000	43800.0000

a. Male employees having salary greater than 40000

Result Grid			Filter Rows:				Export/Import:				Result Grid
	EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining				
▶	CP0087	Felix	M	Finance	48000	1981-04-12	2000-12-10				
	CP0197	Merlin	M	CEO	80000	1990-03-01	2011-05-10				
	CP0213	Philip	M	Retail	47000	1991-04-01	2012-06-11				
	CP0276	Thomas	M	Marketing	44000	1983-11-19	2018-10-22				
✱	NULL	NULL	NULL	NULL	NULL	NULL	NULL				

b. Female employees having salary less than 45000

```
SELECT * FROM Employees WHERE Salary < 45000 and Gender="F";
```

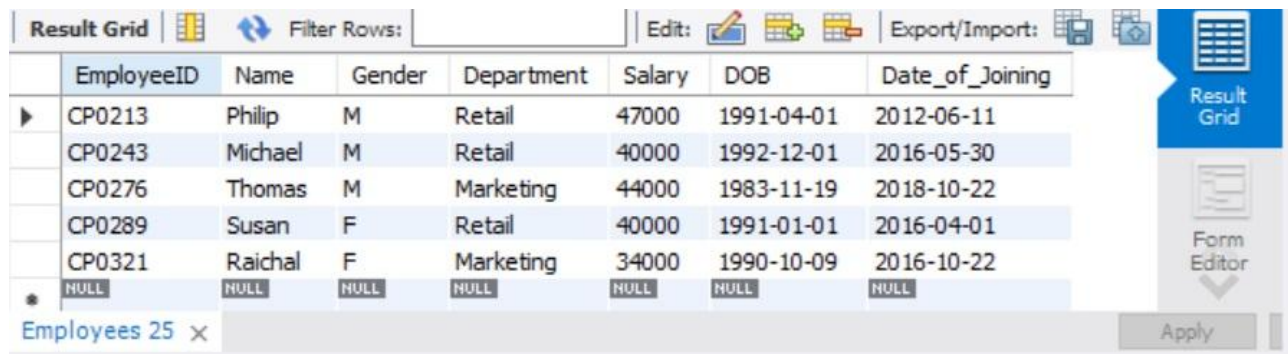


EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining
CP0289	Susan	F	Retail	40000	1991-01-01	2016-04-01
CP0300	Alia	F	Relations	30000	1995-10-17	2016-10-06
CP0321	Raichal	F	Marketing	34000	1990-10-09	2016-10-22
NULL	NULL	NULL	NULL	NULL	NULL	NULL

Employees 24 x Apply

c. Employee having salary between 30000 and 60000 and working in Marketing or Retail department.

```
SELECT * from Employees WHERE (Salary BETWEEN 30000 AND 60000) AND (Department='Marketing' or Department='Retail');
```



EmployeeID	Name	Gender	Department	Salary	DOB	Date_of_Joining
CP0213	Philip	M	Retail	47000	1991-04-01	2012-06-11
CP0243	Michael	M	Retail	40000	1992-12-01	2016-05-30
CP0276	Thomas	M	Marketing	44000	1983-11-19	2018-10-22
CP0289	Susan	F	Retail	40000	1991-01-01	2016-04-01
CP0321	Raichal	F	Marketing	34000	1990-10-09	2016-10-22
NULL	NULL	NULL	NULL	NULL	NULL	NULL

Employees 25 x Apply