# **DATA MANIPULATION**

# Aishwarya A

#### 230701015

Exp No: 2

Create the following tables with the given structure.

#### **EMPLOYEES TABLE**

NAME	NULL?	TYPE
Employee_id	Not null	Number(6)
First_Name		Varchar(20)
Last_Name	Not null	Varchar(25)
Email	Not null	Varchar(25)
Phone_Number		Varchar(20)
Hire_date	Not null	Date
Job_id	Not null	Varchar(10)
Salary	17	Number(8,2)
Commission_pct	3.	Number(2,2)
Manager_id	\$ \$	Number(6)
Department_id		Number(4)

create table employees(employee\_id number(6),First\_Name varchar(20),Last\_Name varchar(25),Email varchar(25),Phone\_number varchar(20),hire\_date date,Job\_id varchar(10),Salary number(8,2),Commission\_pct number(2,2),Manager\_id

number(6),Department\_id number(4));

Column Name	Data Type	Nullable	Default	Primary Key
EMPLOYEE_ID	NUMBER(6,0)	Yes	æ	-
FIRST_NAME	VARCHAR2(20)	Yes	12	-
LAST_NAME	VARCHAR2(25)	Yes	*	-
EMAIL	VARCHAR2(25)	Yes		-
PHONE_NUMBER	VARCHAR2(20)	Yes	-	7 <u>2</u> -
HIRE_DATE	DATE	Yes	-	-
JOB_ID	VARCHAR2(10)	Yes	7	-
SALARY	NUMBER(8,2)	Yes	4	-
COMMISSION_PCT	NUMBER(2,2)	Yes	. <del></del>	-
MANAGER_ID	NUMBER(6,0)	Yes	45	-
DEPARTMENT_ID	NUMBER(4,0)	Yes	=	-
				1 - 11

#### Insert into employees

values(3,'Ralph','Patel','rpatel@gmail.com',9768403822,'11-12-2000',13,5000,.25,101,40);

# Insert into employees

values(4,'George','Austin','geaustin@gmail.com',9573268191,'09-10-2018',14,6000,.3,103,60);

#### Insert into employees values

(1, 'Ben', 'Chad', 'bchad@gmail.com', 9493836325, '24-07-2022', 11, 4500, .15, 100, 70);

# Insert into employees values

(2, 'Bety', 'Dancs', 'bdancs@gmail.com', 9763467298, '19-05-2021', 12, 4800, .17, 100, 56);

# Insert into employees values

(5,'Audrey','Austin','audaustin@gmail.com',9684357377,'06-05-2017',15,7000,.35,104,80);

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
3	Ralph	Patel	rpatel@gmail.com	768403822	11/12/2000	13	5000	.25	101	40
4	George	Austin	geaustin@gmail.com	9573268191	09/10/2018	14	6000	.3	103	60
1	Ben	Chad	bchad@gmail.com	9493836325	04/07/2022	11	4500	.15	100	70
2	Bety	Dancs	bdancs@gmail.com	9763467298	09/05/2021	12	4800	.17	100	56
5	Audrey	Austin	audaustin@gmail.com	9684357377	06/05/2017	15	7000	.35	104	80

(a) Find out the employee id, names, salaries of all the employees select employee\_id,first\_name,last\_name,salary from employees;

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY
3	Ralph	Patel	5000
4	George	Austin	6000
1	Ben	Chad	4500
2	Bety	Dancs	4800
5	Audrey	Austin	7000

(a) List out the employees who works under manager 100 select \*from employees where manager\_id=100;

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	Ben	Chad	bchad@gmail.com	9493836325	04/07/2022	11	4500	.15	100	70
2	Bety	Dancs	bdancs@gmail.com	9763467298	09/05/2021	12	4800	.17	100	56

(b) Find the names of the employees who have a salary greater than or equal to 4800 select first\_name,last\_name from employees where salary>=4800;

FIRST_NAME	LAST_NAME
Ralph	Patel
George	Austin
Bety	Dancs
Audrey	Austin

(a) List out the employees whose last name is \_AUSTIN' select \*from employees where last\_name

='Austin';

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
4	George	Austin	geaustin@gmail.com	9573268191	09/10/2018	14	6000	.3	103	60
5	Audrey	Austin	audaustin@gmail.com	9684357377	06/05/2017	15	7000	.35	104	80

(b) Find the names of the employees who works in departments 60,70 and 80. select first\_name ,last\_name from employees where department\_id=60 or department\_id=70 or department\_id=80;

FIRST_NAME	LAST_NAME
George	Austin
Ben	Chad
Audrey	Austin

(c) Display the unique Manager\_Id.

select distinct manager\_id from employees;

MANAGER_ID
100
101
104
103

Create an Emp table with the following fields: (EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay, NetPay) (Calculate DA as 30% of Basic and HRA as 40% of Basic) create table emp1(empno number(4), empname varchar(25), job varchar(25), basic number(10), da

number(10),hra number(10),pf number(10),grosspay number(10),netpay number(10));

Table	Column	Data Type	Length	Precision		Primary Key	Nullable	Default	Comment
EMP1	EMPNO	NUMBER		4	0	-	/	*	. •/
	EMPNAME	VARCHAR2	25	12	্	- 2	~	25	-
	JOB	VARCHAR2	25				/		*
	BASIC	NUMBER		10	0		/		
	DA	NUMBER		10	0	*	/	*:	-4
	HRA	NUMBER	-	10	0		~		S.)
	PF	NUMBER	-	10	0	-	/	8	*
	GROSSPAY	NUMBER	-	10	0		/		154
	NETPAY	NUMBER		10	0	34	/		+
								1	- 9

(a) Insert Five Records and calculate GrossPay and NetPay.

insert into emp1 values(1,'betty','manager',7000,2100,2800,1000,10,20); insert into emp1 values(2,'annnie','secretary',5000,1500,2000,1500,20,30); insert into emp1

values(3,'ralph','technician',8000,2400,3200,2000,30,40); insert into emp1 values(4,'linda','assistant',4000,1200,1600,1200,40,50); insert into emp1 values(5,'becky','manager',9000,2700,3600,2500,50,60);

EMPNO	EMPNAME	JOB	BASIC	DA	HRA	PF	GROSSPAY	NETPAY
1	betty	manager	7000	2100	2800	1000	10	20
2	annnie	secretary	5000	1500	2000	1500	20	30
3	ralph	technician	8000	2400	3200	2000	30	40
4	linda	assistant	4000	1200	1600	1200	40	50
5	becky	manager	9000	2700	3600	2500	50	60

5 rows returned in 0.00 seconds <u>Download</u>

update emp1

set

grosspay=basic+da+hra+

pf; set netpay=basic-pf;

EMPNO	EMPNAME	JOB	BASIC	DA	HRA	PF	GROSSPAY	NETPAY
1	betty	manager	7000	2100	2800	1000	12900	6000
2	annnie	secretary	5000	1500	2000	1500	10000	3500
3	ralph	technician	8000	2400	3200	2000	15600	6000
4	linda	assistant	4000	1200	1600	1200	8000	2800
5	becky	manager	9000	2700	3600	2500	17800	6500

(b) Display the employees whose Basic is lowest in each department. select \* from basic=(select emp1 where min(basic) from emp1);

MPNO	EMPNAME	JOB	BASIC	DA	HRA	PF	GROSSPAY	NETPAY
	linda	assistant	4000	1200	1600	1200	8000	2800

(c) If Net Pay is less than select \*

from

emp1

where netpay=(select min(netpay)from emp1);

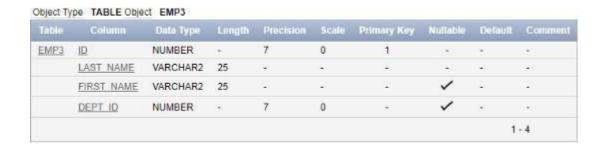
EMPNO EMPNAME JOB BASIC	UA	HRA	116	GROSSPAY	NETPAY
4 linda assistant 4000	1200	1600	1200	8000	2800

2. Create the EMP table based on the following instance chart. Confirm that the table is created.

Column name	ID	LAST_NAME	FIRST_NAME	DEPT_ID
Key Type				
Nulls/Unique				
FK table				
FK column				
Data Type	Number	Varchar2	Varchar2	Number
Length	7	25	25	7

create table emp3(id number(7) primary key not null,last\_name varchar2(25) not null,first\_name

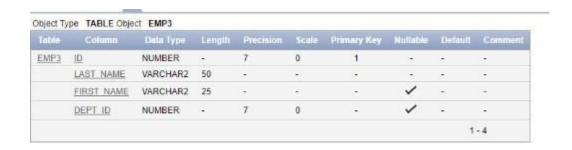
varchar2(25),dept\_id number(7));



3 Modify the EMP table to allow for longer employee last names. Confirm the modification.(Hint: Increase the size to 50).

alter table emp3 modify

last\_name varchar2(50);



4 Create the EMPLOYEES2 table based on the structure of EMPLOYEES table. Include Only the

Employee\_id, First\_name, Last\_name, Salary and Dept\_id coloumns. Name the columns Id, First\_name, Last\_name, salary and Dept\_id respectively.

create table employees2(employee\_id number(4),first\_name varchar(25),last\_name
varchar(20),salary number(10),dept id varchar(5));



5 Drop the EMP table. drop table emp3;

Table dropped.		
0.38 seconds		

6 Rename the EMPLOYEES2 table as EMP. alter table employees2 rename to emp3;

Object Ty	pe TABLE Object	EMP3							
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMP3	EMPLOYEE ID	NUMBER	26	4	0	1.	/	-	12
	FIRST NAME	VARCHAR2	25		7.	-	/		*
	LAST NAME	VARCHAR2	20		7:		/		
	SALARY	NUMBER	28	10	0	5-	/	147	92.5
	DEPT ID	VARCHAR2	5		-	17	/	7	
								1	- 5

8 Drop the First\_name column from the EMP table and confirm it.

# alter table emp3 drop column first\_name;

Object Ty	pe TABLE Object	EMP3							
Table	Column	Data Type	Length	Precision		Primary Key	Nullable	Default	Comment
	EMPLOYEE ID	NUMBER	2	4	0		/	-	14
	LAST NAME	VARCHAR2	20				/		
	SALARY	NUMBER	-	10	0	-	/	÷	4
	DEPT ID	VARCHAR2	5		2	12	/	2	2.
								1	- 4