EXP - 2 - DATA MANIPULATIONS

DATE :

1)Consider a table employees and Execute the following statement

"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		Number(8,2)
Commission_pct		Number(2,2)
Manager_id		Number(6)
Department_id		Number(4)

Ans: create table employees(employee_id number(6) not null,first_name varchar(20),last_name varchar(25) not null,email varchar(25) not null,phone_number varchar(20),hire_date date not null,job_id varchar(10) not null,salary number(8,2),commission_pct number(2,2),manager_id number(6),department_id number(4));

Table: **EMP**

Column	Data Type	Length	Precision	Scale	Nullable
EMPNO	NUMBER	22	-	0	Yes
EMPNAME	VARCHAR2	25	-	-	Yes
JOB	VARCHAR2	20	-	-	Yes
BASIC	NUMBER	22	-	0	Yes
DA	NUMBER	22	-	0	Yes
HRA	NUMBER	22	-	0	Yes
PF	VARCHAR2	15	-	-	Yes
GROSSPAY	NUMBER	22	-	0	Yes
NETPAY	NUMBER	22	-	0	Yes

(a) Find out the employee id, names, salaries of all the employees

Ans: select employee_id,first_name,last_name,salary from employees;

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY
102	surya	mv	600000.58
602	spark	austin	4800.58
101	surweesh	sp	750000.58
506	mounesh	kp	4500.58
705	vijay	r	65000.58

(b) List out the employees who works under manager 100

Ans: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
602	spark	austin	sparkas@gmail.com	6358462197	11/11/2001	AI6291	4800.58	.2	100	70
101	surweesh	sp	surweesh@gmail.com	7788522469	11/25/1994	AI2501	750000.58	.5	100	6565

(c) Find the names of the employees who have a salary greater than or equal to 4800

Ans:select first_name,last_name from employees where salary>=4800;

FIRST_NAME	LAST_NAME
surya	mv
spark	austin
surweesh	sp
vijay	r

(d) List out the employees whose last name is _AUSTIN‘

Ans:select * from employees where last_name like 'austin';

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
602	spark	austin	sparkas@gmail.com	6358462197	11/11/2001	AI6291	4800.58	.2	100	70

(e) Find the names of the employees who works in departments 60,70 and 80
Ans:select first_name,last_name from employees where department_id in(60,70,80);

FIRST_NAME	LAST_NAME
surya	mv
spark	austin
mounesh	kp

(f) Display the unique Manager_Id.
Ans:select distinct manager_id from employees;

MANAGER_ID
200
500
25
100

2)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)

Ans: create table emp(empno int,empname varchar(25),job varchar(20),basic int,da int,hra int,pf varchar(15),grosspay int,netpay int);

Table: **EMP**

Column	Data Type	Length	Precision	Scale	Nullable
EMPNO	NUMBER	22	-	0	Yes
EMPNAME	VARCHAR2	25	-	-	Yes
JOB	VARCHAR2	20	-	-	Yes
BASIC	NUMBER	22	-	0	Yes
DA	NUMBER	22	-	0	Yes
HRA	NUMBER	22	-	0	Yes
PF	VARCHAR2	15	-	-	Yes
GROSSPAY	NUMBER	22	-	0	Yes
NETPAY	NUMBER	22	-	0	Yes

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

Ans:
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insert into emp values(101,'surya','manager',150000,0,0,0,0,0);
insert into emp values(102,'surweesh','developer',75000,0,0,0,0,0);
insert into emp values(103,'suryamv','lead_coder',100000,0,0,0,0,0);
insert into emp values(104,'vijay','developer',65000,0,0,0,0,0);
insert into emp values(105,'vasanth','hr',200000,0,0,0,0,0);
update emp set da=basic*0.3,hra=basic*0.4,pf=basic*0.05,grosspay=basic+da+hra,netpay=grosspay-pf where empno=101;
update emp set da=basic*0.3,hra=basic*0.4,pf=basic*0.05,grosspay=basic+da+hra,netpay=grosspay-pf where empno=102;
update emp set da=basic*0.3,hra=basic*0.4,pf=basic*0.05,grosspay=basic+da+hra,netpay=grosspay-pf where empno=103;
update emp set da=basic*0.3,hra=basic*0.4,pf=basic*0.05,grosspay=basic+da+hra,netpay=grosspay-pf where empno=104;
```

update emp set da=basic*0.3,hra=basic*0.4,pf=basic*0.05,grosspay=basic+da+hra,netpay=grosspay-pf where empno=105;

EMPNO	EMPNAME	JOB	BASIC	DA	HRA	PF	GROSSPAY	NETPAY
104	vijay	developer	65000	19500	26000	3250	110500	107250
105	vasanth	hr	200000	60000	80000	10000	340000	190000
101	surya	manager	150000	45000	60000	7500	255000	247500
103	suryamv	lead_coder	100000	30000	40000	5000	170000	95000
102	surweesh	developer	75000	22500	30000	3750	127500	123750

(b) Display the employees whose Basic is lowest in each department.
Ans:select * from emp where basic in (select min(basic)as basic from emp group by job);

EMPNO	EMPNAME	JOB	BASIC	DA	HRA	PF	GROSSPAY	NETPAY
104	vijay	developer	65000	19500	26000	3250	110500	107250
105	vasanth	hr	200000	60000	80000	10000	340000	190000
101	surya	manager	150000	45000	60000	7500	255000	247500
103	suryamv	lead_coder	100000	30000	40000	5000	170000	95000

(c) If Net Pay is less than 150000
Ans:select * from emp where netpay<150000;

EMPNO	EMPNAME	JOB	BASIC	DA	HRA	PF	GROSSPAY	NETPAY
104	vijay	developer	65000	19500	26000	3250	110500	107250
103	suryamv	lead_coder	100000	30000	40000	5000	170000	95000
102	surweesh	developer	75000	22500	30000	3750	127500	123750

3.1) Create the DEPT table based on the DEPARTMENT following the table instance chart
Below.

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

Ans:create table dept(id number(7),name varchar2(25));

Column	Data Type	Length	Precision	Scale	Nullable
ID	NUMBER	22	7	0	Yes
NAME	VARCHAR2	25	-	-	Yes

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

Ans:create table emp1(id number(7),last_name varchar2(25),first_name varchar2(25),dept_id number(7));

Column	Data Type	Length	Precision	Scale	Nullable
ID	NUMBER	22	7	0	Yes
LAST_NAME	VARCHAR2	25	-	-	Yes
FIRST_NAME	VARCHAR2	25	-	-	Yes
DEPT_ID	NUMBER	22	7	0	Yes

3 Modify the EMP table to allow for longer employee last names. Confirm the modification.(Hint: Increase the size to 50)
Ans:alter table emp1 modify last_name varchar2(50);

Column	Data Type	Length	Precision	Scale	Nullable
ID	NUMBER	22	7	0	Yes
LAST_NAME	VARCHAR2	50	-	-	Yes
FIRST_NAME	VARCHAR2	25	-	-	Yes
DEPT_ID	NUMBER	22	7	0	Yes

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.
Ans:create table employees2 (id number(2),first_name varchar2(25),last_name varchar2(25),salary number(8,2),dept_id number(4));

Column	Data Type	Length	Precision	Scale	Nullable
ID	NUMBER	22	2	0	Yes
FIRST_NAME	VARCHAR2	25	-	-	Yes
LAST_NAME	VARCHAR2	25	-	-	Yes
SALARY	NUMBER	22	8	2	Yes
DEPT_ID	NUMBER	22	4	0	Yes

5 Drop the EMP table.
Ans:drop table emp1;

```
Table dropped.
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6 Rename the EMPLOYEES2 table as EMP.

Ans:alter table employees2 rename to emp1;

```
Table altered.
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7 Add a comment on DEPT and EMP tables. Confirm the modification by describing the Table.
Ans:comment on table dept is 'information of employee department';
comment on table emp1 is 'information of employee details';

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Statement processed.
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8 Drop the First_name column from the EMP table and confirm it.
Ans:alter table emp1 drop column first_name;

```
Table altered.
```

Column	Data Type	Length	Precision	Scale	Nullable
ID	NUMBER	22	2	0	Yes
LAST_NAME	VARCHAR2	25	-	-	Yes
SALARY	NUMBER	22	8	2	Yes
DEPT_ID	NUMBER	22	4	0	Yes