

LAB
ASSIGN
MENT

Code-PCC-CS601 Stream-IT Sem-6th

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Roll Number: 23

Assignment-2

Create table dept with the following attributes:

Column name	Data type(size)	Constraints
dept_id	number(3)	primary key
dept_name	varchar2(15)	-----

```
SQL> create table dept(  
2 dept_id number(3),  
3 dept_name varchar2(15),  
4 constraint pk_dept primary key(dept_id));
```

Table created.

```
SQL> desc dept;
```

Name	Null?	Type

DEPT_ID	NOT NULL	NUMBER(3)
DEPT_NAME		VARCHAR2(15)

Insert 4 depts with names and id's 90, 69, 100 and 110.

```
SQL> insert into dept values(&dept_id, '&dept_name');  
Enter value for dept_id: 90  
Enter value for dept_name: research  
old 1: insert into dept values(&dept_id, '&dept_name')
```

```
new 1: insert into dept values(90, 'research')
```

1 row created.

Commit complete.

```
SQL> /
```

Enter value for dept_id: 69

Enter value for dept_name: finance

```
old 1: insert into dept values(&dept_id, '&dept_name')
```

```
new 1: insert into dept values(69, 'finance')
```

1 row created.

Commit complete.

```
SQL> /
```

Enter value for dept_id: 100

Enter value for dept_name: development

```
old 1: insert into dept values(&dept_id, '&dept_name')
```

```
new 1: insert into dept values(100, 'development')
```

1 row created.

Commit complete.

```
SQL> /
```

Enter value for dept_id: 110

Enter value for dept_name: sales

```
old 1: insert into dept values(&dept_id, '&dept_name')
```

```
new 1: insert into dept values(110, 'sales')
```

1 row created.

Commit complete.

SQL> select * from dept;

DEPT_ID DEPT_NAME

90 research

69 finance

100 development

110 sales

Create table cust_100 with the following attributes:

Column name	Data type(size)	Constraints
emp_id	number(3)	Primary key
first_name	varchar2(10)	Initial letter capital
last_name	varchar2(10)	Initial letter capital and not null
e_mail	varchar2(20)	All upper case
ph_no	varchar2(15)	-----
hire_date	Date	Should be > than 01-jan-1980
job_id	varchar2(10)	Must begin with FI or AD or IT
salary	number(8,2)	≥ 4000 & ≤ 25000
mgr_id	number(3)	-----
dept_id	number(3)	Foreign key, refer table dept

1. Add 10 records to cust_100

SQL> create table cust_100(emp_id number(3) primary key,first_name varchar2(10) check(first_name=initcap(first_name)),last_name varchar2(10) check(last_name=initcap(last_name)) not null,e_mail varchar2(20) check(e_mail=upper(e_mail)),ph_no varchar2(15),hire_date date check(hire_date>'01-JAN-1980'),job_id varchar2(10) check(substr(job_id,0,2) in ('FI', 'AD', 'IT')),salary number(8, 2) check(salary between 4000 and 25000),mgr_id number(3),dept_id number(3),constraint fk_cust_100_dept foreign key(dept_id) references dept(dept_id));

Table created.

SQL> insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no', '&hire_date', '&job_id', &salary, &mgr_id, &dept_id);

Enter value for emp_id: 1

Enter value for first_name: Pronay

Enter value for last_name: Guha

Enter value for e_mail: PRONAY@GMAIL.COM

Enter value for ph_no: 9051604100

Enter value for hire_date: 23-Jul-2021

Enter value for job_id: IT_DEV

Enter value for salary: 25000

Enter value for mgr_id: 11

Enter value for dept_id: 100

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(1, 'Pronay', 'Guha', 'PRONAY@GMAIL.COM', '9051604100', '23-Jul-2021', 'IT_DEV', 25000, 11, 100)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 2

Enter value for first_name: Sagun

Enter value for last_name: Jaiswal

Enter value for e_mail: SJ@GMAIL.COM

Enter value for ph_no: 7003242448

Enter value for hire_date: 23-Jul-2021

Enter value for job_id: IT_SOFT

Enter value for salary: 24500

Enter value for mgr_id: 13

Enter value for dept_id: 110

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(2, 'Sagun', 'Jaiswal', 'SJ@GMAIL.COM', '7003242448', '23-Jul-2021', 'IT_SOFT', 24500, 13, 110)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 3

Enter value for first_name: Debjit

Enter value for last_name: Chatterjee

Enter value for e_mail: JEET@GMAIL.COM

Enter value for ph_no: 6291768764

Enter value for hire_date: 23-Aug-2021

Enter value for job_id: FI_ASST

Enter value for salary: 24000

Enter value for mgr_id: 18

Enter value for dept_id: 110

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(3, 'Debjit', 'Chatterjee', 'JEET@GMAIL.COM', '6291768764', '23-
Aug-2021', 'FI_ASST', 24000, 18, 110)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 4

Enter value for first_name: Rebanta

Enter value for last_name: Ghosh

Enter value for e_mail: REBANTA@GMAIL.COM

Enter value for ph_no: 7756432981

Enter value for hire_date: 07-Aug-2021

Enter value for job_id: AD_TRAINEE

Enter value for salary: 20000

Enter value for mgr_id: 17

Enter value for dept_id: 90

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(4, 'Rebanta', 'Ghosh', 'REBANTA@GMAIL.COM', '7756432981',
'07-Aug-2021', 'AD_TRAINEE', 20000, 17, 90)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 5

Enter value for first_name: Bibartan

Enter value for last_name: Podder

Enter value for e_mail: BP@GMAIL.COM

Enter value for ph_no: 6907654320

Enter value for hire_date: 16-Sep-2021

Enter value for job_id: FI_ASST

Enter value for salary: 23000

Enter value for mgr_id: 18

Enter value for dept_id: 110

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(5, 'Bibartan', 'Podder', 'BP@GMAIL.COM', '6907654320', '16-
Sep-2021', 'FI_ASST', 23000, 18, 110)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 6

Enter value for first_name: Samuel

Enter value for last_name: Joseph

Enter value for e_mail: SAMJ@GMAIL.COM

Enter value for ph_no: 9965487640

Enter value for hire_date: 12-Jun-2021

Enter value for job_id: IT_DEV

Enter value for salary: 24000

Enter value for mgr_id: 11

Enter value for dept_id: 110

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(6, 'Samuel', 'Joseph', 'SAMJ@GMAIL.COM', '9965487640', '12-
Jun-2021', 'IT_DEV', 24000, 11, 110)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 7

Enter value for first_name: Brijesh

Enter value for last_name: Tiwari

Enter value for e_mail: BRIJEH@GMAIL.COM

Enter value for ph_no: 9804567113

Enter value for hire_date: 30-Jul-2021

Enter value for job_id: FI_ASST

Enter value for salary: 23900

Enter value for mgr_id: 18

Enter value for dept_id: 69

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(7, 'Brijesh', 'Tiwari', 'BRIJEH@GMAIL.COM', '9804567113', '30-
Jul-2021', 'FI_ASST', 23900, 18, 69)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 8

Enter value for first_name: Payel

Enter value for last_name: Biswas

Enter value for e_mail: PAYELB@GMAIL.COM

Enter value for ph_no: 999087650

Enter value for hire_date: 29-Aug-2021

Enter value for job_id: IT_DEV

Enter value for salary: 23700

Enter value for mgr_id: 11

Enter value for dept_id: 110

old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)

new 1: insert into cust_100 values(8, 'Payel', 'Biswas', 'PAYELB@GMAIL.COM', '999087650', '29-
Aug-2021', 'IT_DEV', 23700, 11, 110)

1 row created.

Commit complete.

SQL> /

Enter value for emp_id: 9

Enter value for first_name: Abhishek

Enter value for last_name: Pal

Enter value for e_mail: ABHI@GMAIL.COM

Enter value for ph_no: 7980897886

Enter value for hire_date: 30-OCT-2021

Enter value for job_id: FI

Enter value for salary: 19887

Enter value for mgr_id: 11

Enter value for dept_id: 69


```
old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)
```

```
new 1: insert into cust_100 values(9, 'Abhishek', 'Pal', 'ABHI@GMAIL.COM', '7980897886', '30-OCT-
2021', 'FI', 19887, 11, 69)
```

1 row created.

Commit complete.

```
SQL> /
```

Enter value for emp_id: 10

Enter value for first_name: Yuhan

Enter value for last_name: Khan

Enter value for e_mail: YUHANK@GMAIL.COM

Enter value for ph_no: 7867665430

Enter value for hire_date: 29-DEC-2021

Enter value for job_id: AD

Enter value for salary: 21000

Enter value for mgr_id: 10

Enter value for dept_id: 90

```
old 1: insert into cust_100 values(&emp_id, '&first_name', '&last_name', '&e_mail', '&ph_no',
'&hire_date', '&job_id', &salary, &mgr_id, &dept_id)
```

```
new 1: insert into cust_100 values(10, 'Yuhan', 'Khan', 'YUHANK@GMAIL.COM', '7867665430', '29-
DEC-2021', 'AD', 21000, 10, 90)
```

1 row created.

Commit complete.

```
SQL> SET LINESIZE 300;
```

```
SQL> SELECT * FROM CUST_100;
```

EMP_ID	FIRST_NAME	LAST_NAME	E_MAIL	PH_NO	HIRE_DATE	JOB_ID	SALARY	MGR_ID	DEPT_ID
--------	------------	-----------	--------	-------	-----------	--------	--------	--------	---------

11	1	Pronay	Guha	PRONAY@GMAIL.COM	9051604100	23-JUL-21	IT_DEV	25000	
	100								
110	2	Sagun	Jaiswal	SJ@GMAIL.COM	7003242448	23-JUL-21	IT_SOFT	24500	13
18	3	Debjit	Chatterjee	JEET@GMAIL.COM	6291768764	23-AUG-21	FI_ASST	24000	
	110								
20000	4	Rebanta	Ghosh	REBANTA@GMAIL.COM	7756432981	07-AUG-21	AD_TRAINEE		
	17								90
18	5	Bibartan	Podder	BP@GMAIL.COM	6907654320	16-SEP-21	FI_ASST	23000	
	110								
11	6	Samuel	Joseph	SAMJ@GMAIL.COM	9965487640	12-JUN-21	IT_DEV	24000	
	110								
18	7	Brijesh	Tiwari	BRIJEH@GMAIL.COM	9804567113	30-JUL-21	FI_ASST	23900	
	69								
11	8	Payel	Biswas	PAYELB@GMAIL.COM	999087650	29-AUG-21	IT_DEV	23700	
	110								
69	9	Abhishek	Pal	ABHI@GMAIL.COM	7980897886	30-OCT-21	FI	19887	11
10	10	Yuhan	Khan	YUHANK@GMAIL.COM	7867665430	29-DEC-21	AD	21000	
	90								

10 rows selected.

2. Drop column mgr_id

```
SQL> ALTER TABLE CUST_100 DROP COLUMN MGR_ID;
```

Table altered.

3. Add column mgr_id and make itself referenced such that first 4 id's correspond to first emp_id, next 4 correspond to fifth emp_id and the last 2 correspond to the ninth emp_id.

```
SQL> alter table cust_100 add foreign key(mgr_id) references cust_100(emp_id);
```

Table altered.

```
SQL> update cust_100 set mgr_id=1 where emp_id in (1, 2, 3, 4);
```

4 rows updated.

Commit complete.

```
SQL> update cust_100 set mgr_id=5 where emp_id in (5, 6, 7, 8);
```

4 rows updated.

Commit complete.

```
SQL> update cust_100 set mgr_id=9 where emp_id in (9, 10);
```

2 rows updated.

Commit complete.

```
SQL> desc cust_100;
```

Name

Null? Type

EMP_ID
NOT NULL NUMBER(3)

FIRST_NAME
VARCHAR2(10)

LAST_NAME
NOT NULL VARCHAR2(10)

E_MAIL
VARCHAR2(20)

PH_NO
VARCHAR2(15)

HIRE_DATE
DATE

JOB_ID
VARCHAR2(10)

SALARY
NUMBER(8,2)

DEPT_ID
NUMBER(3)

MGR_ID
NUMBER(3)

SQL> select * from cust_100;

EMP_ID	FIRST_NAME	LAST_NAME	E_MAIL	PH_NO	HIRE_DATE	JOB_ID	SALARY	DEPT_ID	MGR_ID
1	Pronay	Guha	PRONAY@GMAIL.COM	9051604100	23-JUL-21	IT_DEV	25000	100	1
2	Sagun	Jaiswal	SJ@GMAIL.COM	7003242448	23-JUL-21	IT_SOFT	24500	110	1
3	Debjit	Chatterjee	JEET@GMAIL.COM	6291768764	23-AUG-21	FI_ASST	24000	110	1
4	Rebanta	Ghosh	REBANTA@GMAIL.COM	7756432981	07-AUG-21	AD_TRAINEE	20000	90	1
5	Bibartan	Podder	BP@GMAIL.COM	6907654320	16-SEP-21	FI_ASST	23000	110	5
6	Samuel	Joseph	SAMJ@GMAIL.COM	9965487640	12-JUN-21	IT_DEV	24000	110	5
7	Brijesh	Tiwari	BRIJEH@GMAIL.COM	9804567113	30-JUL-21	FI_ASST	23900	69	5
8	Payel	Biswas	PAYELB@GMAIL.COM	999087650	29-AUG-21	IT_DEV	23700	110	5
9	Abhishek	Pal	ABHI@GMAIL.COM	7980897886	30-OCT-21	FI	19887	69	9
10	Yuhan	Khan	YUHANK@GMAIL.COM	7867665430	29-DEC-21	AD	21000	90	9

10 rows selected.