

CAP-280
Database Management System
Labroratory-01

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Assignment – 01

Consider the following tables and answer the following:

Bank (num, holder, balance, location, manager)

- ❖ Create a table Managers (M_id, M_name, M_branch), assuming this table to be a parent table, create a foreign key in Bank table. (Add 8 rows each in the table Bank & Managers)

Solution:

Code:

```
CREATE TABLE MANAGER (M_id int primary key, M_name varchar(25), M_branch  
varchar(40));
```

```
CREATE TABLE BANK(Acc_num int unique, Acc_holder varchar(30), Acc_balance  
number(12,2), Acc_location varchar(40), M_id int,constraint s_p foreign key(M_id) references  
MANAGER(M_id));
```

```
INSERT INTO MANAGER VALUES(101,'Shubham','Bnagalore');
```

```
INSERT INTO MANAGER VALUES(102,'Rohan','Patna');
```

```
INSERT INTO MANAGER VALUES(103,'Hiya','Kolkata');
```

```
INSERT INTO MANAGER VALUES(104,'Shivam','Danapur');
```

```
INSERT INTO MANAGER VALUES(105,'Denny','Hyderabad');
```

```
INSERT INTO MANAGER VALUES(106,'Sonam','Amritsar');
```

```
INSERT INTO MANAGER VALUES(107,'Aayushi','Delhi');
```

```
INSERT INTO MANAGER VALUES(108,'Bunny','Utrakhand');
```

OUTPUT→

M_ID	M_NAME	M_BRANCH
101	Shubham	Bnagalore
102	Rohan	Patna
103	Hiya	Kolkata
104	Shivam	Danapur
105	Denny	Hyderabad
106	Sonam	Amritsar
107	Aayushi	Delhi
108	Bunny	Uttrakhand

Download CSV
8 rows selected.

Code:

```

INSERT INTO BANK VALUES(301,'Raja babu',95771.08,'NCR',107);
INSERT INTO BANK VALUES(302,'Aryan tiwari',560000,'BIhar',102);
INSERT INTO BANK VALUES(303,'Madhaw dann',68711.50,'Vijaywada',105);
INSERT INTO BANK VALUES(304,'Om prakash',85991.60,'Jalandhar',102);
INSERT INTO BANK VALUES(305,'Anjali baksi',982200.6,'Kolkata',103);
INSERT INTO BANK VALUES(306,'Sarthak das',8001200.3,'Mysore',101);
INSERT INTO BANK VALUES(307,'Vishal kumar',500440,'Danapur',104);
INSERT INTO BANK VALUES(308,'Vivek bla',40012.60,'Dehradun',108);

```

Output ::

ACC_NUM	ACC HOLDER	ACC_BALANCE	ACC_LOCATION	M_ID
301	Raja babu	95771.08	NCR	107
308	Vivek bla	40012.6	Dehradun	108
302	Aryan tiwari	560000	BIhar	102
303	Madhaw dann	68711.5	Vijaywada	105
304	Om prakash	85991.6	Jalandhar	102
305	Anjali baksi	982200.6	Kolkata	103
306	Sarthak das	8001200.3	Mysore	101
307	Vishal kumar	500440	Danapur	104

Download CSV
8 rows selected.

- ❖ Display details of tables such that data from location 'delhi' and 'mumbai' shall not be displayed.

Solution:

Code:

```
SELECT * FROM BANK WHERE NOT Acc_location='Delhi' AND NOT  
Acc_location='Mumbai';
```

Output ::

ACC_NUM	ACC HOLDER	ACC_BALANCE	ACC_LOCATION	M_ID
301	Raja babu	95771.08	NCR	107
308	Vivek bla	40012.6	Dehradun	108
302	Aryan tiwari	560000	BIhar	102
303	Madhaw dann	68711.5	Vijaywada	105
304	Om prakash	85991.6	Jalandhar	102
305	Anjali baksi	982200.6	Kolkata	103
306	Sarthak das	8001200.3	Mysore	101
307	Vishal kumar	500440	Danapur	104

- ❖ Add a new column 'Manager id' to table and add values for it.

Solution:

Code:

```
ALTER TABLE BANK ADD Manager_id varchar(30);
```

```
UPDATE BANK SET Manager_id='31' where Acc_num=301;
```

```
UPDATE BANK SET Manager_id='32' where Acc_num=302;
```

```
UPDATE BANK SET Manager_id='33' where Acc_num=303;
```

```
UPDATE BANK SET Manager_id='34' where Acc_num=304;
```

```
UPDATE BANK SET Manager_id='35' where Acc_num=305;
```

```
UPDATE BANK SET Manager_id='36' where Acc_num=306;
```

```
UPDATE BANK SET Manager_id='37' where Acc_num=307;
```

```
UPDATE BANK SET Manager_id='38' where Acc_num=308;
```

```
SELECT * FROM BANK;
```

Output ::

ACC_NUM	ACC HOLDER	ACC_BALANCE	ACC_LOCATION	M_ID	MANAGER_ID
301	Raja babu	95771.08	NCR	107	31
308	Vivek bla	40012.6	Dehradun	108	38
302	Aryan tiwari	560000	BIhar	102	32
303	Madhaw dann	68711.5	Vijaywada	105	33
304	Om prakash	85991.6	Jalandhar	102	34
305	Anjali baksi	982200.6	Kolkata	103	35
306	Sarthak das	8001200.3	Mysore	101	36
307	Vishal kumar	500440	Danapur	104	37

❖ Remove all the entries for “manager id” 32.

Solution::

Code ::

DELETE FROM BANK where Manager_id=32;

SELECT * FROM BANK;

Output :

Statement 46





```
DELETE FROM BANK where Manager_id=32
```

1 row(s) deleted.

ACC_NUM	ACC HOLDER	ACC_BALANCE	ACC_LOCATION	M_ID	MANAGER_ID
301	Raja babu	95771.08	NCR	107	31
308	Vivek bla	40012.6	Dehradun	108	38
303	Madhaw dann	68711.5	Vijaywada	105	33
304	Om prakash	85991.6	Jalandhar	102	34
305	Anjali baksi	982200.6	Kolkata	103	35
306	Sarthak das	8001200.3	Mysore	101	36
307	Vishal kumar	500440	Danapur	104	37

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7 rows selected.

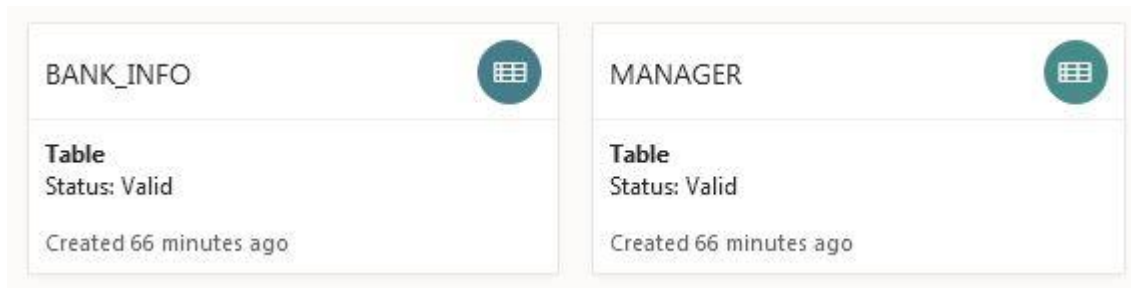
❖ Change the name of table to “Bank_info”.

Solution:

Code:

ALTER TABLE BANK RENAME TO Bank_info;

Output:



❖ Remove the table from the database.

Solution:

Code:

```
DROP TABLE MANAGER;
```

Output:



As, MANAGER is a parent table it can't be dropped/removed.

❖ Sort the data from the table such that people with highest balance should be listed at top.

Solution:

Code:

```
SELECT * FROM Bank_info ORDER BY Acc_balance DESC;
```

Output:

ACC_NUM	ACC HOLDER	ACC_BALANCE	ACC_LOCATION	M_ID	MANAGER_ID
306	Sarthak das	8001200.3	Mysore	101	36
305	Anjali baksi	982200.6	Kolkata	103	35
307	Vishal kumar	500440	Danapur	104	37
301	Raja babu	95771.08	NCR	107	31
304	Om prakash	85991.6	Jalandhar	102	34
303	Madhaw dann	68711.5	Vijaywada	105	33
308	Vivek bla	40012.6	Dehradun	108	38

Download CSV

7 rows selected.

❖ Remove the foreign key from Bank table.

Solution;

Code:

ALTER TABLE Bank_info DROP CONSTRAINT s_p;

Output:

```
Statement 56
ALTER TABLE Bank_info DROP CONSTRAINT s_p
```

Table altered.

❖ Display the manager names having occurrence of letter ‘e’ anywhere twice in the name.

Solution:

Code:

SELECT M_name From MANAGER WHERE M_name LIKE '%e%e%';

Output:

```
Statement 57
SELECT M_name From MANAGER WHERE M_name LIKE '%e%e%'
```

no data found

no data found

As, there were no name with double “e” in the entered data, DB didn’t found any Manager name with double letter“e”.

❖ Add an interest amount of Rs. 4500 to account holders of location 'Uttarakhand'.

Solution:

Code:

```
UPDATE Bank_info SET Acc_balance=Acc_balance+4500 WHERE Acc_location='Uttarakhand';
```

Output:

```
Statement 59
UPDATE Bank_info SET Acc_balance=Acc_balance+4500 WHERE Acc_location='Uttarakhand'
0 row(s) updated.
```

Note::

As, none of the Bank account holders from were from 'Uttarakhand' zero rows were updated.

But to show this UPDATE interest command for evaluation purpose::

❖ Add an interest amount of Rs. 4500 to account holders of location 'Jalandhar'.

Code:

```
UPDATE Bank_info SET Acc_balance=Acc_balance+4500 WHERE Acc_location='Jalandhar';
```

Output:

```
Statement 60
UPDATE Bank_info SET Acc_balance=Acc_balance+4500 WHERE Acc_location='Jalandhar'
1 row(s) updated.
```

ACC_NUM	ACC HOLDER	ACC_BALANCE	ACC_LOCATION	M_ID	MANAGER_ID
301	Raja babu	95771.08	NCR	107	31
308	Vivek bla	40012.6	Dehradun	108	38
303	Madhaw dann	68711.5	Vijaywada	105	33
304	Om prakash	90491.6	Jalandhar	102	34
305	Anjali baksi	982200.6	Kolkata	103	35
306	Sarthak das	8001200.3	Mysore	101	36
307	Vishal kumar	500440	Danapur	104	37

Download CSV

7 rows selected.

Thanking You

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