

LAB TASK#01

1).

The screenshot shows a SQL script with three lines: `desc account;`, `desc customer;`, and `desc depositor;`. Below the script, the 'Script Output' window displays the results of the first two commands. The output for `desc account;` shows columns `ACCOUNT_NO` (NOT NULL, CHAR(5)) and `BALANCE` (NUMBER). The output for `desc customer;` is not visible.

Name	Null?	Type
ACCOUNT_NO	NOT NULL	CHAR(5)
BALANCE		NUMBER

2).

The screenshot shows a SQL script with one line: `DESC CUSTOMER;`. Below the script, the 'Script Output' window displays the results of the command. The output shows columns `CUSTOMER_NO` (NOT NULL, CHAR(5)), `CUSTOMER_NAME` (VARCHAR2(20)), and `CUSTOMER_CITY` (VARCHAR2(20)).

Name	Null?	Type
CUSTOMER_NO	NOT NULL	CHAR(5)
CUSTOMER_NAME		VARCHAR2(20)
CUSTOMER_CITY		VARCHAR2(20)

3).

The screenshot shows a SQL script with two lines: `DESC CUSTOMER;` and `DESC DEPOSITOR;`. Below the script, the 'Script Output' window displays the results of both commands. The output for `DESC CUSTOMER;` shows columns `ACCOUNT_NO` (NOT NULL, CHAR(5)) and `CUSTOMER_NO` (NOT NULL, CHAR(5)). The output for `DESC DEPOSITOR;` is not visible.

Name	Null?	Type
ACCOUNT_NO	NOT NULL	CHAR(5)
CUSTOMER_NO	NOT NULL	CHAR(5)

LAB TASK#02

1).

```
ALTER TABLE customer ADD date_of_birth DATE;
desc customer;
```

Script Output x

Task completed in 0.107 seconds

Table CUSTOMER altered.

Name	Null?	Type
CUSTOMER_NO	NOT NULL	CHAR(5)
CUSTOMER_NAME		VARCHAR2(20)
CUSTOMER_CITY		VARCHAR2(20)
DATE_OF_BIRTH		DATE

2).

```
ALTER TABLE customer DROP column date_of_birth;
DESC CUSTOMER;
```

Script Output x

Task completed in 0.107 seconds

Name	Null?	Type
CUSTOMER_NO	NOT NULL	CHAR(5)
CUSTOMER_NAME		VARCHAR2(20)
CUSTOMER_CITY		VARCHAR2(20)

3).

```
ALTER TABLE DEPOSITOR RENAME COLUMN ACCOUNT_NO TO a_no;
ALTER TABLE DEPOSITOR RENAME COLUMN customer_NO TO c_no;
desc depositor;
```

Script Output x

Task completed in 0.111 seconds

Table DEPOSITOR altered.

Table DEPOSITOR altered.

Name	Null?	Type
A_NO	NOT NULL	CHAR(5)
C_NO	NOT NULL	CHAR(5)

4).

```
ALTER TABLE DEPOSITOR ADD CONSTRAINT depositor_fk1 FOREIGN KEY(a_no) REFERENCES ACCOUNT(account_no);
ALTER TABLE DEPOSITOR ADD CONSTRAINT depositor_fk2 FOREIGN KEY(c_no) REFERENCES customer(customer_no);
desc depositor;
```

Script Output x

Task completed in 0.089 seconds

Table DEPOSITOR altered.

Table DEPOSITOR altered.

Name	Null?	Type
A_NO	NOT NULL	CHAR(5)
C_NO	NOT NULL	CHAR(5)

LAB TASK#3

A_NO	C_NO
A-101	C-101
A-103	C-102
A-103	C-104
A-102	C-103

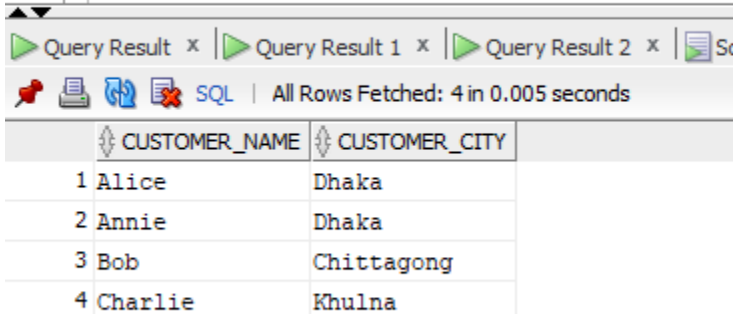
ACCOU	BALANCE
A-101	12000
A-102	6000
A-103	2500

CUSTO	CUSTOMER_NAME	CUSTOMER_CITY
C-101	Alice	Dhaka
C-102	Annie	Dhaka
C-103	Bob	Chittagong
C-104	Charlie	Khulna

LAB TASK#04

1.

```
select customer_name, customer_city
from customer;
```



The screenshot shows a SQL query execution window. The query is: `select customer_name, customer_city from customer;`. The results are displayed in a table with two columns: `CUSTOMER_NAME` and `CUSTOMER_CITY`. The results are as follows:

	CUSTOMER_NAME	CUSTOMER_CITY
1	Alice	Dhaka
2	Annie	Dhaka
3	Bob	Chittagong
4	Charlie	Khulna

2.

```
SELECT DISTINCT customer_city
FROM customer;
```

Query Result x | Query Result 1 x | Query Result 2 x

SQL | All Rows Fetched: 3 in 0.004 seconds

	CUSTOMER_CITY
1	Dhaka
2	Khulna
3	Chittagong

3.

```
SELECT account_no, balance
FROM account
WHERE balance > 7000;
```

Query Result x

SQL | All Rows Fetched: 1 in 0.006 seconds

	ACCOUNT_NO	BALANCE
1	A-101	12000

4.

```
SELECT customer_no, customer_name
FROM customer
WHERE customer_city = 'Khulna';
```

Query Result x

SQL | All Rows Fetched: 1 in 0.006 seconds

	CUSTOMER_NO	CUSTOMER_NAME
1	C-104	Charlie

5.

```
SELECT customer_no, customer_name
FROM customer
WHERE not customer_city = 'Dhaka';
```

Query Result x

SQL | All Rows Fetched: 2 in 0.006 seconds

	CUSTOMER_NO	CUSTOMER_NAME
1	C-103	Bob
2	C-104	Charlie

6.

```
SELECT customer.customer_name, customer.customer_city
FROM customer JOIN depositor ON customer.customer_no = depositor.c_no
JOIN account ON account.account_no = depositor.a_no
WHERE account.balance > 7000;
```

Query Result x

SQL | All Rows Fetched: 1 in 0.011 seconds

	CUSTOMER_NAME	CUSTOMER_CITY
1	Alice	Dhaka

7.

```
SELECT customer.customer_name, customer.customer_city
FROM customer JOIN depositor ON customer.customer_no = depositor.c_no
JOIN account ON account.account_no = depositor.a_no
WHERE account.balance > 7000 and not (customer_city = 'Khulna');
```

Query Result x

SQL | All Rows Fetched: 1 in 0.008 seconds

	CUSTOMER_NAME	CUSTOMER_CITY
1	Alice	Dhaka

8.

```
SELECT account.account_no, account.balance
FROM customer JOIN depositor ON customer.customer_no = depositor.c_no
JOIN account ON account.account_no = depositor.a_no
WHERE customer_no = 'C-102';
```

Query Result x

SQL | All Rows Fetched: 1 in 0.073 seconds

	ACCOUNT_NO	BALANCE
1	A-103	2500

9.

```
SELECT account.account_no, account.balance
FROM customer JOIN depositor ON customer.customer_no = depositor.c_no
JOIN account ON account.account_no = depositor.a_no
WHERE customer.customer_city = ('Dhaka') or customer.customer_city = ('Khulna');
```

Query Result x





SQL | All Rows Fetched: 3 in 0.015 seconds

	ACCOUNT_NO	BALANCE
1	A-101	12000
2	A-103	2500
3	A-103	2500

10.

```
SELECT customer_no, customer_name
FROM customer JOIN depositor ON customer.customer_no = depositor.c_no
WHERE depositor.a_no = NULL;
```

Query Result x

    SQL | All Rows Fetched: 0 in 0.011 seconds

CUSTOMER_NO	CUSTOMER_NAME
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