

LAB

ASSIGNMENT: 01

SQL Select Practice

Name and Seat no: Syed Wasif Ali (B20102171)

Database Name: B20102171

Table Name: WorkerSWA

TASKS:

1. Create the following table using INSERT INTO.

Query:

```
CREATE TABLE WorkerSWA (  
  WORKER_ID INTEGER PRIMARY KEY,  
  FIRST_NAME TEXT NOT NULL,  
  LAST_NAME TEXT NOT NULL,  
  SALARY INTEGER NOT NULL,  
  JOINING_DATE TEXT NOT NULL,  
  DEPARTMENT TEXT NOT NULL  
);
```

```
INSERT INTO WorkerSWA( WORKER_ID,FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE, DEPARTMENT)  
VALUES(1,"Monika","Arora",100000,"2014-02-20 09:00:00","HR"),  
(2,"Niharika","Verma",80000,"2014-06-11 09:00:00","Admin"),  
(3,"Vishal","Singhal",300000,"2014-02-20 09:00:00","HR"),  
(4,"Amitabh","Singh",500000,"2014-02-20 09:00:00","Admin"),  
(5,"Vivek","Bhati",500000,"2014-06-11 09:00:00","Admin"),  
(6,"Vipul","Diwan",200000,"2014-06-11 09:00:00","Account"),  
(7,"Satish","Kumar",75000,"2014-01-20 09:00:00","Account"),  
(8,"Geetika","Chauhan",90000,"2014-04-11 09:00:00","Admin");
```

```
SELECT * FROM WorkerSWA;
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

2. Write an SQL query to fetch “FIRST_NAME” from Worker table using the alias name as <WORKER_NAME>.

Query:

```
SELECT FIRST_NAME AS WORKER_NAME  
FROM WorkerSWA;
```

Result:

WORKER_NAME
Monika
Niharika
Vishal
Amitabh
Vivek
Vipul
Satish
Geetika

3. Write an SQL query to fetch “FIRST_NAME” from Worker table in upper case. (Function Hint: Upper)

Query:

```
SELECT UPPER(FIRST_NAME)
FROM WorkerSWA;
```

Result:

UPPER(FIRST_NAME)
MONIKA
NIHARIKA
VISHAL
AMITABH
VIVEK
VIPUL
SATISH
GEETIKA

4. Write an SQL query to fetch unique values of DEPARTMENT from Worker table.

Query:

```
SELECT DISTINCT DEPARTMENT
FROM WorkerSWA;
```

Result:

DEPARTMENT
HR
Admin
Account

5. Write an SQL query to print the first three characters of FIRST_NAME from Worker table.

Query:

```
SELECT SUBSTRING(FIRST_NAME,1,3)
FROM WorkerSWA;
```

Result:

SUBSTRING(FIRST_NAME,1,3)
Mon
Nih
Vis
Ami
Viv
Vip
Sat
Gee

6. Write an SQL query to print the DEPARTMENT from Worker table.

Query:

```
SELECT DEPARTMENT
FROM WorkerSWA;
```

Result:

DEPARTMENT
HR
Admin
HR
Admin
Admin
Account
Account
Admin

7. Write an SQL query that fetches the unique values of DEPARTMENT and print its length. (Function Hint: Length)

Query:

```
SELECT DISTINCT DEPARTMENT, LENGTH(DEPARTMENT)
FROM WorkerSWA;
```

Result:

DEPARTMENT	LENGTH(DEPARTMENT)
HR	2
Admin	5
Account	7

8. Write an SQL query to print the FIRST_NAME from Worker table after replacing 'a' with 'A'.

Query:

```
SELECT REPLACE(FIRST_NAME, "a", "A")
FROM WorkerSWA;
```

Result:

REPLACE(FIRST_NAME, "a", "A")
Monika
NihArika
VishAl
AmitAbh
Vivek
Vipul
SAtish
Geetika

9. Write an SQL query to print the FIRST_NAME and LAST_NAME from Worker table into a single column COMPLETE_NAME. A space char should separate them. (Function Hint: Concat)

Query:

```
/*SELECT CONCAT(FIRST_NAME, ' ', LAST_NAME) AS COMPLETE_NAME
FROM WorkerSWA;*/
/*SELECT FIRST_NAME + ' ' + LAST_NAME AS COMPLETE_NAME
FROM WorkerSWA;*/
SELECT FIRST_NAME || ' ' || LAST_NAME AS COMPLETE_NAME
FROM WorkerSWA;
```

Result:

COMPLETE_NAME
Monika Arora
Niharika Verma
Vishal Singhal
Amitabh Singh
Vivek Bhati
Vipul Diwan
Satish Kumar
Geetika Chauhan

10. Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending.

Query:

```
SELECT * FROM WorkerSWA
ORDER BY FIRST_NAME ASC;
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin

11. Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending and DEPARTMENT Descending.

Query:

```
SELECT * FROM WorkerSWA  
ORDER BY FIRST_NAME ASC,DEPARTMENT DESC;
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin

12. Write an SQL query to print details for Workers with the first name as “Vipul” and “Satish” from Worker table.

Query:

```
SELECT * FROM WorkerSWA  
WHERE FIRST_NAME IN("Vipul","Satish");
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

13. Write an SQL query to print details of workers excluding first names, “Vipul” and “Satish” from Worker table.

Query:

```
SELECT * FROM WorkerSWA
WHERE NOT FIRST_NAME IN("Vipul","Satish");
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

14. Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000.

Query:

```
SELECT * FROM WorkerSWA
WHERE SALARY >=100000 AND SALARY <= 500000;
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account

15. Write an SQL query to print details of the Workers who have joined in Feb'2014.

Query:

```
SELECT * FROM WorkerSWA  
WHERE JOINING_DATE LIKE "2014-02%";
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin

16. Write an SQL query to fetch the count of employees working in the department 'Admin'.

Query:

```
SELECT COUNT(DEPARTMENT)  
FROM WorkerSWA  
WHERE DEPARTMENT = "Admin";
```

Result:

COUNT(DEPARTMENT)

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