

Experiment:3**DATE: 09-08-2024****WRITING BASIC SQL SELECT STATEMENTS**

Find the Solution for the following:

1. True OR False

The following statement executes successfully.

Identify the Errors

```
SELECT employee_id, last_name sal*12 ANNUAL SALARY FROM employees;
```

Correction:

```
SELECT
```

```
    employee_id,
```

```
    last_name,
```

```
    salary * 12 AS annual_salary
```

```
FROM
```

```
    employees;
```

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)

Queries

2. Show the structure of departments the table. Select all the data from it

```
CREATE TABLE EMPLOYEES (
```

```
    Employee_id    NUMBER(6)    NOT NULL,
```

```
    First_Name     VARCHAR2(20),
```

```
    Last_Name      VARCHAR2(25) NOT NULL,
```

```
    Email          VARCHAR2(25) NOT NULL,
```

```

Phone_Number  VARCHAR2(20),
Hire_date     DATE      NOT NULL,
Job_id        VARCHAR2(10) NOT NULL,
Salary        NUMBER(8,2),
Commission_pct NUMBER(2,2),
Manager_id    NUMBER(6),
Department_id NUMBER(4),
CONSTRAINT emp_pk PRIMARY KEY (Employee_id)
);

```

Object Type TABLE Object EMPLOYEES									
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
EMPLOYEES	EMPLOYEE_ID	NUMBER	-	6	0	1	-	-	-
	FIRST_NAME	VARCHAR2	20	-	-	-	✓	-	-
	LAST_NAME	VARCHAR2	25	-	-	-	✓	-	-
	EMAIL	VARCHAR2	25	-	-	-	✓	-	-
	PHONE_NUMBER	VARCHAR2	20	-	-	-	✓	-	-
	HIRE_DATE	DATE	7	-	-	-	-	-	-
	JOB_ID	VARCHAR2	10	-	-	-	-	-	-
	SALARY	NUMBER	-	8	2	-	✓	-	-
	COMMISSION_PCT	NUMBER	-	2	2	-	✓	-	-
	MANAGER_ID	NUMBER	-	6	0	-	✓	-	-
	DEPARTMENT_ID	NUMBER	-	4	0	-	✓	-	-

1 - 11

```
SELECT * FROM EMPLOYEES;
```

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	EMAIL	PHONE_NUMBER	HIRE_DATE	JOB_ID	SALARY	COMMISSION_PCT	MANAGER_ID	DEPARTMENT_ID
1	JACK	STEVE	steve@gmail.com	IN001	09/09/2020	DE001	15000	.4	100	30
2	THENU	RAVI	thenu@gmail.com	IN002	07/09/2007	CS090	23000	.9	101	35
3	SANDY	SIVA	sandy@gmail.com	IN004	05/02/2003	CS090	20000	.9	100	35
4	DHARSH	DJ	dj@gmail.com	IN034	06/22/2003	HR450	33300	.3	105	70
5	HEMA	RAAGAEEL	HEMA@gmail.com	IN023	02/22/2020	AR344	23000	.5	101	60

5 rows returned in 0.00 seconds [Download](#)

3. Create a query to display the last name, job code, hire date, and employee number for each employee, with employee number appearing first

Results Explain Describe Saved SQL History			
EMPLOYEE_ID	LAST_NAME	JOB_ID	HIRE_DATE
1	STEVE	DE001	09/09/2020
2	RAVI	CS090	07/09/2007
3	SIVA	CS090	05/02/2003
4	DJ	HR450	06/22/2003
5	RAAGAEEL	AR344	02/22/2020

5 rows returned in 0.00 seconds [Download](#)

4. Provide an alias STARTDATE for the hire date.

EMPLOYEE_ID	STARTDATE
1	09/09/2020
2	07/09/2007
3	05/02/2003
4	06/22/2003
5	02/22/2020

5 rows returned in 0.01 seconds

5. Create a query to display unique job codes from the employee table.

JOB_ID
HR450
AR344
DE001
CS090

6. Display the last name concatenated with the job ID , separated by a comma and space, and name the column EMPLOYEE and TITLE.

EMPLOYEE AND TITLE
STEVE, DE001
RAVI, CS090
SIVA, CS090
DJ, HR450
RAAGAEI, AR344

7. Create a query to display all the data from the employees table. Separate each column by a comma. Name the column THE_OUTPUT.

SELECT

```
Employee_id || ', ' ||
NVL(First_Name, '') || ', ' ||
Last_Name || ', ' ||
Email || ', ' ||
NVL(Phone_Number, '') || ', ' ||
TO_CHAR(Hire_date, 'YYYY-MM-DD') || ', ' ||
Job_id || ', ' ||
NVL(TO_CHAR(Salary, '')) || ', ' ||
NVL(TO_CHAR(Commission_pct, '')) || ', ' ||
NVL(TO_CHAR(Manager_id, '')) || ', ' ||
NVL(TO_CHAR(Department_id, '')) AS THE_OUTPUT
```

FROM

EMPLOYEES;

THE_OUTPUT													
1,	JACK,	STEVE,	steve@gmail.com,	IN001,	2020-09-09,	DE001,	15000,	.4,	100,	30			
2,	THENU,	RAVI,	thenu@gmail.com,	IN002,	2007-07-09,	CS090,	23000,	.9,	101,	35			
3,	SANDY,	SIVA,	sandy@gmail.com,	IN004,	2003-05-02,	CS090,	20000,	.9,	100,	35			
4,	DHARSH,	DJ,	dj@gmail.com,	IN034,	2003-06-22,	HR450,	33300,	.3,	105,	70			
5,	HEMA,	RAAGAEI,	HEMA@gmail.com,	IN023,	2020-02-22,	AR344,	23000,	.5,	101,	60			

5 rows returned in 0.00 seconds [Download](#)