Ex.No.: 3	WRITING BASIC SQL SELECT STATEMENTS
Date: 6/8/24	

Find the Solution for the following: True OR False

1. The following statement executes successfully. Identify the Errors SELECT employee_id, last_name sal*12 ANNUAL SALARY FROM employees;

False ->Corrected Query :

Select employee_id,last_name,salary*12 AS "Annual Salary" from Employees;

CREATE TABLE DEPARTMENT (Dept_id NUMBER(6) , Dept_name VARCHAR(20),Manager_id NUMBER(6), Location_id NUMBER(4));

Object Type **TABLE** Object **DEPARTMENT**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPARTMENT	DEPT_ID	NUMBER	-	6	0	-	✓	-	-
	DEPT_NAME	VARCHAR2	20	-	-	-	✓	-	-
	MANAGER_ID	NUMBER	-	6	0	-	✓	-	-
	LOCATION_ID	NUMBER	-	4	0	-	✓	-	-
									1 - 4

DEPT_ID	DEPT_NAME	MANAGER_ID	LOCATION_ID
1	IT	101	1
2	HR	102	2
3	Finance	103	3

CREATE TABLE LOCATION (Location_id NUMBER(4) NOT NULL, St_addr VARCHAR(40), Postal_code VARCHAR(12), City VARCHAR(30) NOT NULL, State_province VARCHAR(25), Country_id CHAR(2), PRIMARY KEY (Location_id));

Object Type **TABLE** Object **LOCATION**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
LOCATION	LOCATION_ID	NUMBER	-	4	0	1	-	-	-
	ST_ADDR	VARCHAR2	40	-	-	-	✓	-	-
	POSTAL_CODE	VARCHAR2	12	-	-	-	✓	-	-
	CITY	VARCHAR2	30	-	-	-	-	-	-
	STATE_PROVINCE	VARCHAR2	25	-	-	-	✓	-	-
	COUNTRY_ID	CHAR	2	-	-	-	✓	-	-
									1 - 6

LOCATION_ID	ST_ADDR	POSTAL_CODE	CITY	STATE_PROVINCE	COUNTRY_ID
1	123 Main St	12345	Los Angeles	California	US
2	456 Elm St	23456	New York	New York	US
3	789 Oak St	34567	Chicago	Illinois	US

CREATE TABLE JOB_GRADE (Grade_level VARCHAR(2),Lowest_sal NUMBER, Highest_sal NUMBER);

Object Type **TABLE** Object **JOB_GRADE**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
JOB_GRADE	GRADE_LEVEL	VARCHAR2	2	-	-	-	✓	-	-
	LOWEST_SAL	NUMBER	22	-	-	-	✓	-	-
	HIGHEST_SAL	NUMBER	22	-	-	-	✓	-	-
									1 - 3

GRADE_LEVEL	LOWEST_SAL	HIGHEST_SAL
A	3000	5000
B	5001	7000
C	7001	9000

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

DESCRIBE DEPARTMENT;

Object Type **TABLE** Object **DEPARTMENT**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPARTMENT	DEPT_ID	NUMBER	-	6	0	-	✓	-	-
	DEPT_NAME	VARCHAR2	20	-	-	-	✓	-	-
	MANAGER_ID	NUMBER	-	6	0	-	✓	-	-
	LOCATION_ID	NUMBER	-	4	0	-	✓	-	-
									1 - 4

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

SELECT employee_id, last_name, job_id, hire_date FROM EMPLOYEES;

EMPLOYEE_ID	LAST_NAME	JOB_ID	HIRE_DATE
101	Austin	IT_PROG	01/01/2022
102	Smith	HR_REP	02/15/2023
103	Jones	IT_PROG	05/20/2021
104	Davis	SALES	09/10/2020
105	Austin	HR_REP	03/23/2019

4. Provide an alias STARTDATE for the hire date.

SELECT employee_id, last_name, job_id, hire_date AS STARTDATE FROM EMPLOYEES;

EMPLOYEE_ID	LAST_NAME	JOB_ID	STARTDATE
101	Austin	IT_PROG	01/01/2022
102	Smith	HR_REP	02/15/2023
103	Jones	IT_PROG	05/20/2021
104	Davis	SALES	09/10/2020
105	Austin	HR_REP	03/23/2019

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

SELECT DISTINCT job_id FROM EMPLOYEES;

JOB_ID
IT_PROG
SALES
HR_REP

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

SELECT last_name || ', ' || job_id AS EMPLOYEE_TITLE FROM EMPLOYEES;

EMPLOYEE_TITLE
Austin, IT_PROG
Smith, HR_REP
Jones, IT_PROG
Davis, SALES
Austin, HR_REP

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 || ', ' || FIRST_NAME || ', ' || LAST_NAME || ', ' || EMAIL || ', ' || PHONE_NUMBER || ', ' || TO_CHAR(HIRE_DATE, 'YYYY-MM-DD') || ', ' || JOB_ID || ', ' || SALARY || ', ' || COMMISSION_PCT || ', ' || MANAGER_ID || ', ' || DEPARTMENT_ID AS THE_OUTPUT FROM EMPLOYEES;

THE_OUTPUT
101, John, Austin, jaustin@example.com, 123-456-7890, 2022-01-01, IT_PROG, 5000, .23, 100, 60
102, Betty, Smith, bsmith@example.com, 123-456-7891, 2023-02-15, HR_REP, 4500, .2, 100, 60
103, Ralph, Jones, rjones@example.com, 123-456-7892, 2021-05-20, IT_PROG, 4800, .05, 101, 70
104, Chad, Davis, cdavis@example.com, 123-456-7893, 2020-09-10, SALES, 5300, .13, 102, 80
105, Audrey, Austin, aaustin@example.com, 123-456-7894, 2019-03-23, HR_REP, 3000, .15, 100, 60