

Lab Task # 01 (Creating a table):

1.(a).

```
CREATE TABLE instructor_2022360045 (  
    ID NUMBER, Name VARCHAR2(30) ,Dept_Name VARCHAR2(30) , Salary NUMBER  
);
```

Script Output x Query Result x
Task completed in 0.031 seconds

Table INSTRUCTOR_2022360045 created.

1.(b).

```
CREATE TABLE course_2022360045 (  
    Course_ID VARCHAR2(30), Title VARCHAR2(30) ,Dept_Name VARCHAR2(30) , Credits NUMBER  
);
```

Script Output x Query Result x
Task completed in 0.08 seconds

Table COURSE_2022360045 created.

Lab Task # 02 (Inserting data into a table):

2.(a).

```
INSERT INTO instructor_2022360045 (id, name, dept_name, salary) VALUES (10101, 'Srinivasan', 'Comp. Sci.', 65000);  
INSERT INTO instructor_2022360045 VALUES (12121, 'Wu', 'Finance', 90000);  
INSERT INTO instructor_2022360045 VALUES (15151, 'Mozart', 'Music', 40000);  
INSERT INTO instructor_2022360045 VALUES (22222, 'Einstein', 'Physics', 95000);  
INSERT INTO instructor_2022360045 VALUES (32343, 'El Said', 'History', 60000);  
INSERT INTO instructor_2022360045 VALUES (33456, 'Gold', 'Physics', 87000);  
INSERT INTO instructor_2022360045 VALUES (45565, 'Katz', 'Comp. Sci.', 75000);  
INSERT INTO instructor_2022360045 VALUES (58583, 'Califieri', 'History', 62000);  
INSERT INTO instructor_2022360045 VALUES (76543, 'Singh', 'Finance', 80000);  
INSERT INTO instructor_2022360045 VALUES (76766, 'Crick', 'Biology', 72000);  
INSERT INTO instructor_2022360045 VALUES (83821, 'Brandt', 'Comp. Sci.', 92000);  
INSERT INTO instructor_2022360045 VALUES (98345, 'Kim', 'Elec. Eng.', 80000);
```

Script Output x Query Result x
Task completed in 0.08 seconds

1 row inserted.

1 row inserted.

1 row inserted.

OUTPUT:

	ID	NAME	DEPT_NAME	SALARY
1	10101	Srinivasan	Comp. Sci.	65000
2	12121	Wu	Finance	90000
3	15151	Mozart	Music	40000
4	22222	Einstein	Physics	95000
5	32343	El Said	History	60000
6	33456	Gold	Physics	87000
7	45565	Katz	Comp. Sci.	75000
8	58583	Califieri	History	62000
9	76543	Singh	Finance	80000
10	76766	Crick	Biology	72000
11	83821	Brandt	Comp. Sci.	92000
12	98345	Kim	Elec. Eng.	80000

2.(b).

```
INSERT INTO course_2022360045 VALUES ('BIO-101', 'Intro. to Biology', 'Biology', 4);
INSERT INTO course_2022360045 VALUES ('BIO-301', 'Genetics', 'Biology', 4);
INSERT INTO course_2022360045 VALUES ('BIO-399', 'Computational Biology', 'Biology', 3);
INSERT INTO course_2022360045 VALUES ('CS-101', 'Intro. to Computer Science', 'Comp. Sci.', 4);
INSERT INTO course_2022360045 VALUES ('CS-190', 'Game Design', 'Comp. Sci.', 4);
INSERT INTO course_2022360045 VALUES ('CS-315', 'Robotics', 'Comp. Sci.', 3);
INSERT INTO course_2022360045 VALUES ('CS-319', 'Image Processing', 'Comp. Sci.', 3);
INSERT INTO course_2022360045 VALUES ('CS-347', 'Database System Concepts', 'Comp. Sci.', 3);
INSERT INTO course_2022360045 VALUES ('EE-181', 'Intro. to Digital Systems', 'Elec. Eng.', 3);
INSERT INTO course_2022360045 VALUES ('FIN-201', 'Investment Banking', 'Finance', 3);
INSERT INTO course_2022360045 VALUES ('HIS-351', 'World History', 'History', 3);
INSERT INTO course_2022360045 VALUES ('MU-199', 'Music Video Production', 'Music', 3);
INSERT INTO course_2022360045 VALUES ('PHY-101', 'Physical Principles', 'Physics', 4);
```

Script Output x Query Result x

Task completed in 0.053 seconds

1 row inserted.

1 row inserted.

1 row inserted.

OUTPUT:

	⚡ COURSE...	🔍 TITLE	⚡ DEPT_NAME	⚡ CREDITS
1	BIO-101	Intro. to Biology	Biology	4
2	BIO-301	Genetics	Biology	4
3	BIO-399	Computational Biology	Biology	3
4	CS-101	Intro. to Computer Science	Comp. Sci.	4
5	CS-190	Game Design	Comp. Sci.	4
6	CS-315	Robotics	Comp. Sci.	3
7	CS-319	Image Processing	Comp. Sci.	3
8	CS-347	Database System Concepts	Comp. Sci.	3
9	EE-181	Intro. to Digital Systems	Elec. Eng.	3
10	FIN-201	Investment Banking	Finance	3
11	HIS-351	World History	History	3
12	MU-199	Music Video Production	Music	3
13	PHY-101	Physical Principles	Physics	4

Lab Task # 03 (Writing Queries):

```
--LAB TASK 03
-- I
SELECT Name FROM instructor_2022360045;
```

Script Output x Query Result x

📌 🖨️ 🔍 🗑️ SQL | All Rows Fetched: 12 in 0.001 seconds

	⚡ NAME
1	Srinivasan
2	Wu
3	Mozart
4	Einstein
5	El Said
6	Gold
7	Katz
8	Califieri
9	Singh
10	Crick
11	Brandt
12	Kim

--II

```
SELECT Course_ID, Title FROM course_2022360045;
```

Script Output x Query Result x	
All Rows Fetched: 13 in 0.001 seconds	
COURSE_ID	TITLE
1 BIO-101	Intro. to Biology
2 BIO-301	Genetics
3 BIO-399	Computational Biology
4 CS-101	Intro. to Computer Science
5 CS-190	Game Design
6 CS-315	Robotics
7 CS-319	Image Processing
8 CS-347	Database System Concepts
9 EE-181	Intro. to Digital Systems
10 FIN-201	Investment Banking
11 HIS-351	World History
12 MU-199	Music Video Production
13 PHY-101	Physical Principles

--III

```
SELECT Name, dept_name FROM instructor_2022360045 WHERE ID=22222;
```

Script Output x Query Result x	
All Rows Fetched: 1 in 0.002 seconds	
NAME	DEPT_NAME
1 Einstein Physics	

--IV

```
SELECT Title, credits FROM course_2022360045 WHERE dept_name='Comp. Sci.';
```

Script Output x Query Result x	
All Rows Fetched: 5 in 0.004 seconds	
TITLE	CREDITS
1 Intro. to Computer Science	4
2 Game Design	4
3 Robotics	3
4 Image Processing	3
5 Database System Concepts	3

```
--V
SELECT name, dept_name FROM instructor_2022360045 WHERE Salary > 70000;
```

Script Output x Query Result x
 All Rows Fetched: 8 in 0.002 seconds

	NAME	DEPT_NAME
1	Wu	Finance
2	Einstein	Physics
3	Gold	Physics
4	Katz	Comp. Sci.
5	Singh	Finance
6	Crick	Biology
7	Brandt	Comp. Sci.
8	Kim	Elec. Eng.

```
--VI
SELECT title FROM course_2022360045 WHERE credits >= 4;
```

Script Output x Query Result x
 All Rows Fetched: 5 in 0.003 seconds

	TITLE
1	Intro. to Biology
2	Genetics
3	Intro. to Computer Science
4	Game Design
5	Physical Principles

```
--VII
SELECT Name, Dept_name FROM instructor_2022360045 WHERE salary > 80000 AND salary < 100000;
```

Script Output x Query Result x
 All Rows Fetched: 4 in 0.002 seconds

	NAME	DEPT_NAME
1	Wu	Finance
2	Einstein	Physics
3	Gold	Physics
4	Brandt	Comp. Sci.

```
--VIII
SELECT Title, credits FROM course_2022360045 WHERE dept_name != 'Comp. Sci.';
```

Script Output x Query Result x
 All Rows Fetched: 8 in 0.003 seconds

	TITLE	CREDITS
1	Intro. to Biology	4
2	Genetics	4
3	Computational Biology	3
4	Intro. to Digital Systems	3
5	Investment Banking	3
6	World History	3
7	Music Video Production	3
8	Physical Principles	4

```
--IX
```

```
SELECT * FROM instructor_2022360045;
```

Script Output x Query Result x				
SQL All Rows Fetched: 12 in 0.002 seconds				
ID	NAME	DEPT_NAME	SALARY	
1 10101	Srinivasan	Comp. Sci.	65000	
2 12121	Wu	Finance	90000	
3 15151	Mozart	Music	40000	
4 22222	Einstein	Physics	95000	
5 32343	El Said	History	60000	
6 33456	Gold	Physics	87000	
7 45565	Katz	Comp. Sci.	75000	
8 58583	Califieri	History	62000	
9 76543	Singh	Finance	80000	
10 76766	Crick	Biology	72000	
11 83821	Brandt	Comp. Sci.	92000	
12 98345	Kim	Elec. Eng.	80000	

```
--X
```

```
SELECT * FROM course_2022360045 WHERE dept_name = 'Biology' AND Credits != 4;
```

Script Output x Query Result x				
SQL All Rows Fetched: 1 in 0.003 seconds				
COURSE_ID	TITLE	DEPT_NAME	CREDITS	
1 BIO-399	Computational Biology	Biology	3	