

## Lab Task 01

### I.

#### Execution:

```
create table instructor_2023160085
(
    id char(5) not null,
    name varchar2(20) not null,
    dept_name varchar2(50) not null,
    salary number not null
);
```

#### Result:

ID	NAME	DEPT_NAME	SALARY
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### II.

#### Execution:

```
create table course_2023160085
(
    course_id char(7) not null,
    title varchar2(30) not null,
    dept_name varchar2(50) not null,
    credits number not null
);
```

#### Result:

COURSE_ID	TITLE	DEPT_NAME	CREDITS
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## Lab Task 02

### I.

#### Execution:

```
insert into instructor_2023160085 values ('10101', 'Srinivasan', 'Comp.Sci.', 65000);
insert into instructor_2023160085 values ('12121', 'Wu', 'Finance', 90000);
insert into instructor_2023160085 values ('15151', 'Mozart', 'Music', 40000);
insert into instructor_2023160085 values ('22222', 'Einstein', 'Physics', 95000);
insert into instructor_2023160085 values ('32343', 'El Said', 'History', 60000);
insert into instructor_2023160085 values ('33456', 'Gold', 'Physics', 87000);
insert into instructor_2023160085 values ('45565', 'Katz', 'Comp.Sci.', 75000);
insert into instructor_2023160085 values ('58583', 'Califieri', 'History', 62000);
insert into instructor_2023160085 values ('76543', 'Singh', 'Finance', 80000);
insert into instructor_2023160085 values ('76766', 'Crick', 'Biology', 72000);
insert into instructor_2023160085 values ('83821', 'Brandt', 'Comp.Sci.', 92000);
insert into instructor_2023160085 values ('98345', 'Kim', 'Elec. Eng.', 80000);
```

## Result:

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

## II.

### Execution:

```
insert into course_2023160085 values('BIO-101', 'Intro. to Biology', 'Biology', 4);
insert into course_2023160085 values('BIO-301', 'Genetics', 'Biology', 4);
insert into course_2023160085 values('BIO-399', 'Computational Biology', 'Biology', 3);
insert into course_2023160085 values('CS-101', 'Intro. to Computer Science', 'Comp. Sci.', 4);
insert into course_2023160085 values('CS-190', 'Game Design', 'Comp. Sci.', 4);
insert into course_2023160085 values('CS-315', 'Robotics', 'Comp. Sci.', 3);
insert into course_2023160085 values('CS-319', 'Image Processing', 'Comp. Sci.', 3);
insert into course_2023160085 values('CS-347', 'Database System Concepts', 'Comp. Sci.', 3);
insert into course_2023160085 values('EE-181', 'Intro. to Digital Systems', 'Elec. Eng.', 3);
insert into course_2023160085 values('FIN-201', 'Investment Banking', 'Finance', 3 );
insert into course_2023160085 values('HIS-351', 'World History', 'History', 3);
insert into course_2023160085 values('MU-199', 'Music Video Production', 'Music', 3);
insert into course_2023160085 values('PHY-101', 'Physical Principles', 'Physics', 4);
```

## Result:

	⚡ COURSE_ID	⚡ 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

### I.

#### Execution:

```
select name
from instructor_2023160085;
```

#### Result:

	⚡ 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.

#### Execution:

```
select course_id,title
from course_2023160085;
```

### Result:

	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.

#### Execution:

```
select name, dept_name
from instructor_2023160085
where id = 22222;
```

### Result:

	NAME	DEPT_NAME	
1	Einstein	Physics	

### IV.

#### Execution:

```
select title, credits
from course_2023160085
where dept_name = 'Comp. Sci.';
```

### Result:

	⚡ 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.

### Execution:

```
select name, dept_name
from instructor_2023160085
where salary > 70000;
```

### Result:

	⚡ 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.

### Execution:

```
select title
from course_2023160085
where not(credits < 4);
```

### Result:

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

## VII.

### Execution:

```
select name, dept_name
from instructor_2023160085
where salary between 80000 and 100000;
```

**Result:**

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

**VIII.**

**Execution:**

```
select title, credits
from course_2023160085
where not (dept_name = 'Comp. Sci.');
```

**Result:**

	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.**

**Execution:**

```
select *
from instructor_2023160085;
```

**Result:**

	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.

Execution:

```
select *
from course_2023160085
where dept_name = 'Biology' and not(credits = 4);
```

Result:

	COURSE_ID	TITLE	DEPT_NAME	CREDITS
1	BIO-399	Computational Biology	Biology	3