

```
create table instructor (  
ID char(5),  
name varchar(20) not null,  
dept_name varchar(20),  
salary numeric(8,2)  
);
```

```
INSERT INTO instructor (ID, name, dept_name,salary)  
VALUES ('2013331050', 'Jakirul Islam', 'EEE','30000');
```

```
INSERT INTO instructor (ID, name, dept_name,salary)  
VALUES ('2013331060', 'Khairul Islam', 'CSE','40000');
```

```
INSERT INTO instructor (ID, name, dept_name,salary)  
VALUES ('2013331070', 'Safikul Islam', 'BBA','50000');
```

```
INSERT INTO instructor (ID, name, dept_name,salary)  
VALUES ('2013331048', 'Ashikul Islam', 'CSE','60000');
```

```
SELECT * FROM instructor;  
SELECT salary FROM instructor;  
SELECT salary, dept_name FROM instructor;  
select distinct dept_name from instructor;  
select all dept_name from instructor;  
select '437' ;  
select '437' as FOO;  
select ID, name, salary/12 from instructor;  
select ID, name, salary/12 as monthly_salary;  
select name from instructor where dept_name = 'CSE';  
select name from instructor where dept_name = 'CSE' and salary > 40000;  
select name from instructor  where name like '%kul%';
```

```
create table teaches (  
ID char(5),  
course_id varchar(20),  
sec_id char(20),  
semester varchar(20),  
year char(5)  
);
```

```
INSERT INTO teaches (ID, course_id, sec_id,semester, year)
```

```
VALUES ('2013331048', 'CSE-123', '1', 'Fall', '2020');
```

```
INSERT INTO teaches (ID, course_id, sec_id, semester, year)  
VALUES ('2013331050', 'CSE-323', '1', 'Fall', '2019');
```

```
INSERT INTO teaches (ID, course_id, sec_id, semester, year)  
VALUES ('2013331060', 'CSE-523', '1', 'Spring', '2018');
```

```
INSERT INTO teaches (ID, course_id, sec_id, semester, year)  
VALUES ('2013331090', 'CSE-123', '1', 'Autumn', '2030');
```

```
select name, course_id  
from instructor, teaches  
where instructor.ID = teaches.ID
```

```
select name, course_id  
from instructor, teaches  
where instructor.ID = teaches.ID and instructor.dept_name = 'CSE';
```

```
select distinct T.name from instructor as T, instructor as S where T.salary > S.salary and  
S.dept_name = 'CSE';
```

```
select distinct name from instructor order by name
```

select distinct name from instructor order by dept_name

select distinct name from instructor **order by name asc**

select distinct name from instructor **order by name desc**

select distinct name from instructor order by dept_name, name

select name from instructor where salary between 40000 and 60000

select name, course_id from instructor, teaches where (instructor.ID,
dept_name) = (teaches.ID, 'CSE');

select course_id from teaches where semester = 'Fall' and year = '2019'

union

select course_id from teaches where semester = 'Spring' and year = '2018';

select course_id from teaches where semester = 'Fall' and year = '2019'

intersect

select course_id from teaches where semester = 'Spring' and year = '2018';

select course_id from teaches where semester = 'Fall' and year = '2019'

except

select course_id from teaches where semester = 'Spring' and year = '2018';

select distinct *T.salary*
from *instructor* **as** *T*, *instructor* **as** *S*
where *T.salary* < *S.salary*

select distinct *salary*
from *instructor*

select distinct salary
from instructor
EXCEPT
select distinct T.salary
from instructor as T, instructor as S
where T.salary < S.salary

select *name*
from *instructor*
where *salary* is null
SELECT MAX(salary) FROM instructor;
SELECT MIN(salary) FROM instructor;

SELECT AVG(salary) FROM instructor;

SELECT SUM(salary) FROM instructor;

SELECT count(salary) FROM instructor;

select dept_name, sum (salary) as avg_salary from instructor group by
dept_name;

select dept_name, avg (salary)
from instructor

```
group by dept_name  
having avg (salary) > 42000;
```

```
select distinct course_id  
from teaches  
where semester = 'Fall' and year= '2019' AND course_id in (select  
course_id from teaches where semester = 'Spring' and year= '2018');
```

```
select distinct course_id  
from teaches  
where semester = 'Fall' and year= '2019' AND course_id not in (select  
course_id from teaches where semester = 'Spring' and year= '2018');
```

```
select distinct T.name  
from instructor as T, instructor as S  
where T.salary > S.salary and S.dept_name = 'CSE';
```

```
select dept_name, avg_salary from (select dept_name, avg (salary) as  
avg_salary from instructor group by dept_name) where avg_salary >  
42000;
```

delete from *instructor*

delete from instructor where dept_name='BBA'

delete from instructor

```
where salary < (select avg (salary)
                from instructor);
```

```
insert into teaches      select ID, name, dept_name, 0,0 from
instructor
```

```
update instructor set salary = 100000 where salary > 40000;
```

```
update instructor set salary = case when salary <= 100000 then salary  
* 1.05 else salary * 1.03 end
```