

SQL Interview Questions for Data Science

- *Common Questions*

1. **Write a query to add multiple cols in a table.**

```
insert into users VALUES  
(null,'Kadambari',20,124),  
(null,'Niru',54,134),  
(null,'Kirit',65,224);
```

2. **Write a query to add/delete multiple cols in a table.**

```
alter table users  
add email varchar(255) not null,  
add password varchar(255) not null
```

```
alter table users  
drop column email,  
drop column password
```

3. **Write a query to find out the 2nd highest value in a table.**

```
select * from movies order by score desc limit 1,1  
select * from movies order by score asc limit 1,1
```

4. **Find max value without using ORDER BY.**

Since the budget column is in varchar datatype 1st we need to change it into bigint

```
alter table movies modify column budget bigint then make use of nested queries  
in this case  
select name,budget  
from movies  
where budget *(select max(budget) from movies)
```

5. **Find managers of all employees.**

Here the concept SELF JOIN is used

```
Select e1.name,e2.fname  
from employees  
e1 join employees e2  
on e1.manager_id=e2.id
```

6. Use of wild cards.

```
select * from movies where name like 'A_____';  
select * from movies where name like '%Man';
```

7. If else based questions.

```
Select name,(sibsp+Parch) as 'size',  
Case  
When ,(sibsp+Parch) <= 2 then 'small'  
When (sibsp+Parch) >2 and (sibsp+Parch) <5 then 'medium'  
End as 'type'  
From titanic
```

8. Find category-wise top value.

```
select genre,name,score  
from movies m1  
where score = (Select max(score)  
from movies m2 where m2.genre=m1.genre)
```

9. Find/delete all the duplicate values.

```
Select * from contacts where id not in (select min (id) from contacts group by  
fm,ln,email)  
Delete * from contacts where id not in (select min (id) from contacts group by  
fm,ln,email)
```

10. Joining tables

```
select name,age,group_name  
from users u  
join membership m  
on u.user_id=m.user_id  
join groups g  
on m.group_id=g.group_id
```