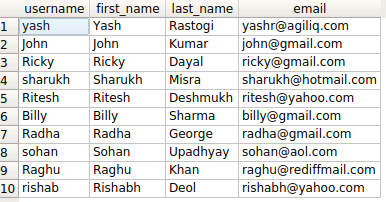
# 2. How to do OR queries in Django ORM?



If you are using django.contrib.auth, you will have a table called auth\_user. It will have fields as username, first\_name, last\_name and more.

A common requirement is performing OR filtering with two ore more conditions. Say you want find all users with firstname starting with ‘R’ and last\_name starting with ‘D’.

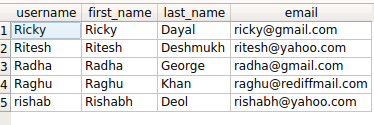
Django provides two options.

* queryset\_1 | queryset\_2
* filter(Q(<condition\_1>)|Q(<condition\_2>)

# 2.1. The query in detail

The SQL query for the above condition will look something like

SELECT username, first\_name, last\_name, email FROM auth\_user WHERE first\_name LIKE 'R%' OR last\_name LIKE 'D%';



Similarly our ORM query would look like

>>> queryset = User.objects.filter(

first\_name\_\_startswith='R') | User.objects.filter( last\_name\_\_startswith='D')

>>> queryset

<QuerySet [<User: Ricky>, <User: Ritesh>, <User: Radha>, <User: Raghu>, <User: rishab>]>

You can also look at the generated query.

In [5]: str(queryset.query)

Out[5]: 'SELECT "auth\_user"."id", "auth\_user"."password", "auth\_user"."last\_login",

"auth\_user"."is\_superuser", "auth\_user"."username", "auth\_user"."first\_name",

"auth\_user"."last\_name", "auth\_user"."email", "auth\_user"."is\_staff",

"auth\_user"."is\_active", "auth\_user"."date\_joined" FROM "auth\_user"

WHERE ("auth\_user"."first\_name"::text LIKE R% OR "auth\_user"."last\_name"::text LIKE D%)'

Alternatively, you can use the Q objects.

**from** django.db.models **import** Q

qs = User.objects.filter(Q(first\_name\_\_startswith='R')|Q(last\_name\_\_startswith='D'))

If you look at the generated query, the result is exactly the same

In [9]: str(qs.query)

Out[9]: 'SELECT "auth\_user"."id", "auth\_user"."password", "auth\_user"."last\_login",

"auth\_user"."is\_superuser", "auth\_user"."username", "auth\_user"."first\_name",

"auth\_user"."last\_name", "auth\_user"."email", "auth\_user"."is\_staff",

"auth\_user"."is\_active", "auth\_user"."date\_joined" FROM "auth\_user"

WHERE ("auth\_user"."first\_name"::text LIKE R% OR "auth\_user"."last\_name"::text LIKE D%)'