Question 9 [5 Marks]

Consider the following database table named water_schemes :

water_schemes		
scheme_no	district_name	capacity
1	Ajmer	20
1	Bikaner	10
2	Bikaner	10
3	Bikaner	20
1	Churu	10
2	Churu	20
1	Dungargarh	10

The number of tuples returned by the following SQL query is

```
with total(name, capacity) as

select district_name, sum(capacity)

from water_schemes

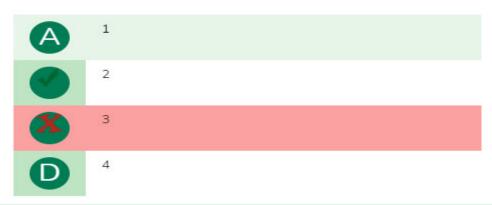
group by district_name
with total_avg(capacity) as

select avg(capacity)
```

```
from total
select name

from total, total_avg

where total.capacity >= total_avg.capacity
```



Explanation

First group by district name is performed and total capacities obtained as following

Ajmer 20

Bikaner 40

Charu 30

Dungargarh 10

Then average capacity is computed,

Average Capacity = (20 + 40 + 30 + 10)/4

= 100/4

= 25.

Finally districts with more than average are selected.

Bikaner is 40 which is greater than average (25)

Charu is 30 which is also greater than average (25).

Therefore answer is 2 tuples.