## Some queries:

1. What is the total number of users and categorize them by roles?

```
SELECT r_name AS Role, r_description AS Description,
(SELECT COUNT(*)
FROM Access
WHERE Access.r_id = Roles.r_id) AS Total
FROM Roles
```

	Role	Description	Total
1	General User	Has no special permissions	50
2	Seller	Can sell company products	5
3	Driver	Can drive company vehicles	10
4	Doctor	Can provide medical treatment	10

2. Find users whose age is greater than or equal to 40 and lives in New York?

```
SELECT *
FROM [User]
WHERE [u_age] >= 40 AND [u_address] LIKE '%NY%';
```



3. Select the name and email of the user with a specific mobile number 555-987-6543?

```
SELECT [u_name], [u_email]
FROM [User] WHERE [u_mobile] = '555-987-6543';
```



4. Select all doctors who have a rating greater than or equal to 4.5 and is available also sort them according to their rating.

```
SELECT *
FROM Doctor
WHERE d_rating >= 4.5 and d_status = 'Available'
order by d_rating desc;
```



5. Select the name and specialties of doctors who work on Monday to Thursday and have a cost less than or equal to 500.

6. Select the doctor ID, name, and cost for doctors whose cost is less than the average cost of all doctors.

```
SELECT d_id, u_name, d_cost

FROM Doctor ,[User]

WHERE [Doctor].d_id = [User].u_id

and d_cost < (SELECT AVG(d_cost) FROM Doctor);

Hesults Messages

d_id u_name d_cost
```



7. Select the number of doctors who are 'Dermatologist'.

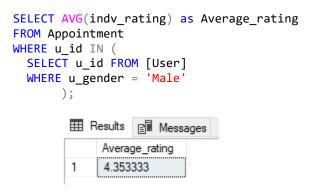
```
SELECT COUNT(*) AS num_doctors
FROM Doctor
WHERE d_speciality = 'Dermatologist';

Results Messages

num_doctors

1 2
```

8. What is the average rating of all appointments made by male patients?



9. How many times online appointment happened?

```
select count(app_type) as Total
from Appointment
where app_type = 'Online'

Results Messages

Total
1 16
```

10. Show all the doctor names and their appointment count and sort them in descending order?

```
select u_name as DocName, count(d_id) as AppointmentCount
from Appointment, [User]
where [Appointment].d_id = [User].u_id
group by d_id,u_name
order by AppointmentCount desc
```



11. Find hospital details if they have ICU available and sort them by cost?

```
Select * from Hospital
where h_icuStatus = 'Available'
order by h_cost
```

	Results	E Messages							
	h_id	h_name	h_location	h_phone	h_icuStatus	h_bloodGroup1	h_bloodGroup2	h_bloodGroup3	h_cost
1	101	St. Mary Hospital	New York City	555-123-4567	Available	A+	B-	0+	500
2	110	Mercy Hospital	Chicago	555-012-3456	Available	0+	A-	B-	600
3	112	University of Colorado Hospital	Aurora	555-234-5078	Available	0+	B+	0-	800
4	104	Massachusetts General Hospital	Boston	555-456-7890	Available	AB+	B+	0+	800
5	103	Johns Hopkins Hospital	Baltimore	555-345-6789	Available	A+	A-	AB-	1000
6	113	Duke University Hospital	Durham	555-345-6089	Available	B-	0+	AB+	1000
7	115	UCSF Medical Center	San Francisco	555-567-8001	Available	A+	AB+	0-	1100
8	107	Stanford Hospital	Stanford	555-789-0123	Available	AB-	0+	A-	1100
9	106	Mayo Clinic	Rochester	555-678-9012	Available	A+	B+	0-	1200

## 12. Find hospital details where O+ blood is available?

```
select * from Hospital
where h_bloodGroup1 = '0+' or h_bloodGroup2 = '0+' or h_bloodGroup3 = '0+'
```

$\blacksquare$	Results	Messages							
	h_id	h_name	h_location	h_phone	h_icuStatus	h_bloodGroup1	h_bloodGroup2	h_bloodGroup3	h_cos
1	101	St. Mary Hospital	New York City	555-123-4567	Available	A+	B-	0+	500
2	104	Massachusetts General Hospital	Boston	555-456-7890	Available	AB+	B+	0+	800
3	105	Cleveland Clinic	Cleveland	555-567-8901	Not Available	0+	0-	B-	900
4	107	Stanford Hospital	Stanford	555-789-0123	Available	AB-	0+	A-	1100
5	109	Texas Medical Center	Houston	555-901-2345	Not Available	0+	AB+	0-	950
6	110	Mercy Hospital	Chicago	555-012-3456	Available	0+	A-	B-	600
7	112	University of Colorado Hospital	Aurora	555-234-5078	Available	0+	B+	0-	800
8	113	Duke University Hospital	Durham	555-345-6089	Available	B-	0+	AB+	1000

## 13. Which hospital holds how many users/patients?

```
select h_name as HospitalName, count(Admit.h_id) as UserCount
from Admit, Hospital
where Admit.h_id = Hospital.h_id
group by h_name, Admit.h_id
```

Results						
	HospitalName	UserCount				
1	St. Mary Hospital	3				
2	Mount Sinai Hospital	3				
3	Johns Hopkins Hospital	3				
4	Massachusetts General Hospital	3				
5	Cleveland Clinic	3				
6	Mayo Clinic	3				
7	Stanford Hospital	3				
8	UCLA Medical Center	3				
9	Texas Medical Center	3				
10	Mercy Hospital	3				

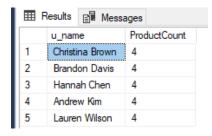
## 14. Find all the ambulances in San Francisco?

```
Select * from Ambulence
where a_location like '%SF%';
```



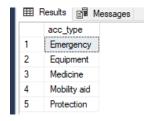
15. Find out the names of the sellers and count of the products they sell?

```
select u_name, count(acc_id) as ProductCount
from [Medical Accessories], [User]
where seller_id = [User].u_id
group by u_name, seller_id
```

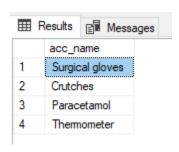


16. What distinct type of products are available to purchase?

```
select distinct(acc_type)
from [Medical Accessories]
```



17. What products does 'Christina Brown' sell?



18. Show the total cost of all purchases made?

```
SELECT SUM(totalCost) AS total_cost
FROM Buys;
```



19. Show the name of the user and total number of medical accessories purchased by them?

```
SELECT u_name, SUM(quantity) AS total_quantity
FROM Buys, [User]
where [User].u_id = Buys.u_id
GROUP BY u_name;
```

