**Internship Task - RDBMS and SQL Task #6**

**Doctor-Patient Appointment System.**

**1]** SELECT doctor\_id, COUNT(appointment\_id) AS total\_appointments

FROM Appointments

GROUP BY doctor\_id;

| [**doctor\_id**](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=Appointments&sql_query=SELECT+doctor_id%2C+COUNT%28appointment_id%29+AS+total_appointments%0AFROM+Appointments%0AGROUP+BY+doctor_id+ORDER+BY+%60Appointments%60.%60doctor_id%60+ASC&session_max_rows=30&token=23b478d9eab19e58e96903f63db156c3) | [**total\_appointments**](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=Appointments&sql_query=SELECT+doctor_id%2C+COUNT%28appointment_id%29+AS+total_appointments%0AFROM+Appointments%0AGROUP+BY+doctor_id+ORDER+BY+%60total_appointments%60+ASC&session_max_rows=30&token=23b478d9eab19e58e96903f63db156c3) |
| --- | --- |
| [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [2](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+2&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [3](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+3&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [4](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+4&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [5](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+5&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [6](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+6&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [7](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+7&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [8](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+8&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [9](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+9&token=23b478d9eab19e58e96903f63db156c3) | 1 |
| [10](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=doctors&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60doctors%60+WHERE+%60doctor_id%60+%3D+10&token=23b478d9eab19e58e96903f63db156c3) | 1 |

2]. SELECT p.patient\_id, p.first\_name, p.last\_name, p.email, p.phone, p.date\_of\_birth, p.gender, p.address

FROM Patients p

JOIN Appointments a ON p.patient\_id = a.patient\_id

JOIN Doctors d ON a.doctor\_id = d.doctor\_id

WHERE d.first\_name = 'John' AND d.last\_name = 'Smith';

3]. SELECT d.department\_name, COUNT(a.appointment\_id) AS total\_appointments

FROM Appointments a

JOIN Doctors doc ON a.doctor\_id = doc.doctor\_id

JOIN Departments d ON doc.department\_id = d.department\_id

WHERE d.department\_name = 'Cardiology'

GROUP BY d.department\_name;

| **department\_name** | **total\_appointments** |
| --- | --- |
| Cardiology | 1 |

4]. SELECT s.specialty\_name, COUNT(a.appointment\_id) AS total\_appointments

FROM Appointments a

JOIN Doctors doc ON a.doctor\_id = doc.doctor\_id

JOIN Specialties s ON doc.specialty\_id = s.specialty\_id

GROUP BY s.specialty\_name

ORDER BY total\_appointments DESC

LIMIT 1;

| **specialty\_name** | **Total\_appointments** |
| --- | --- |
| Cardiology | 1 |

5]. SELECT SUM(p.payment\_amount) AS total\_payment

FROM Payments p

JOIN Appointments a ON p.appointment\_id = a.appointment\_id

WHERE a.status = 'Completed';

| **total\_payment** |
| --- |
| *NULL*  *6].* *SELECT doc.first\_name, doc.last\_name, COUNT(DISTINCT a.patient\_id) AS total\_patients*  *FROM Appointments a*  *JOIN Doctors doc ON a.doctor\_id = doc.doctor\_id*  *GROUP BY doc.doctor\_id;*   | [**first\_name**](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=Appointments&sql_query=SELECT+doc.first_name%2C+doc.last_name%2C+COUNT%28DISTINCT+a.patient_id%29+AS+total_patients%0AFROM+Appointments+a%0AJOIN+Doctors+doc+ON+a.doctor_id+%3D+doc.doctor_id%0AGROUP+BY+doc.doctor_id+ORDER+BY+%60doc%60.%60first_name%60+ASC&session_max_rows=30&token=23b478d9eab19e58e96903f63db156c3) | [**last\_name**](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=Appointments&sql_query=SELECT+doc.first_name%2C+doc.last_name%2C+COUNT%28DISTINCT+a.patient_id%29+AS+total_patients%0AFROM+Appointments+a%0AJOIN+Doctors+doc+ON+a.doctor_id+%3D+doc.doctor_id%0AGROUP+BY+doc.doctor_id+ORDER+BY+%60doc%60.%60last_name%60+ASC&session_max_rows=30&token=23b478d9eab19e58e96903f63db156c3) | [**total\_patients**](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=Appointments&sql_query=SELECT+doc.first_name%2C+doc.last_name%2C+COUNT%28DISTINCT+a.patient_id%29+AS+total_patients%0AFROM+Appointments+a%0AJOIN+Doctors+doc+ON+a.doctor_id+%3D+doc.doctor_id%0AGROUP+BY+doc.doctor_id+ORDER+BY+%60total_patients%60+ASC&session_max_rows=30&token=23b478d9eab19e58e96903f63db156c3) | | --- | --- | --- | | Dr. Arjun | Sharma | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Priya | Singh | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Rajesh | Verma | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Anjali | Kumar | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Vikram | Gupta | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Neha | Reddy | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Rohit | Mehta | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Sanya | Chopra | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Karan | Patel | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) | | Dr. Pooja | Desai | [1](http://localhost/phpmyadmin/sql.php?db=doctor-patient+appointment+system&table=patients&pos=0&sql_query=SELECT+%2A+FROM+%60doctor-patient+appointment+system%60.%60patients%60+WHERE+%60patient_id%60+%3D+1&token=23b478d9eab19e58e96903f63db156c3) |   7]. SELECT p.patient\_id, p.first\_name, p.last\_name, p.email, p.phone, p.date\_of\_birth, p.gender, p.address  FROM Patients p  JOIN Appointments a ON p.patient\_id = a.patient\_id  WHERE a.status = 'Cancelled';   | **status** | **total\_appointments** | | --- | --- | | Scheduled | 10 |   8]. **SELECT a.status, COUNT(a.appointment\_id) AS total\_appointments**  **FROM Appointments a**  **GROUP BY a.status;**   | **status** | **total\_appointments** | | --- | --- | | Scheduled | 10 |   **9].** SELECT AVG(p.payment\_amount) AS average\_payment  FROM Payments p  JOIN Appointments a ON p.appointment\_id = a.appointment\_id  WHERE a.status = 'Completed';   | **average\_payment** | | --- | | *NULL* |   10]. SELECT doc.first\_name, doc.last\_name, COUNT(a.appointment\_id) AS total\_appointments  FROM Appointments a  JOIN Doctors doc ON a.doctor\_id = doc.doctor\_id  GROUP BY doc.doctor\_id  ORDER BY total\_appointments DESC  LIMIT 1;   | **first\_name** | **last\_name** | **total\_appointments** | | --- | --- | --- | | Dr. Arjun | Sharma | 1 | |