SQL Queries and Result Relations

**--Query 1: Which congenital infection type is the most common among all the patients?**

*CREATE VIEW ci\_type\_count AS*

*SELECT CI\_TYPE, COUNT(CI\_TYPE) AS ci\_type\_count*

*FROM ci\_finding*

*GROUP BY CI\_TYPE;*

*CREATE VIEW max\_ci\_type\_count AS*

*SELECT MAX(CI\_TYPE\_COUNT) AS max\_ci\_type\_count*

*FROM CI\_TYPE\_COUNT;*

*SELECT CI\_TYPE\_COUNT.CI\_TYPE*

*FROM CI\_TYPE\_COUNT*

*INNER JOIN MAX\_CI\_TYPE\_COUNT*

*ON CI\_TYPE\_COUNT.CI\_TYPE\_COUNT=MAX\_CI\_TYPE\_COUNT.MAX\_CI\_TYPE\_COUNT;*

**CI\_TYPE**

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**CMV**

**Rubella**

**--QUERY 2: What is the age range of patients?**

*CREATE VIEW patient\_age AS*

*SELECT PATIENT\_ID, FLOOR((CURRENT\_DATE - DATE\_OF\_BIRTH)/365.25) AS CURRENT\_AGE*

*FROM DEMOGRAPHICS;*

*SELECT MIN(CURRENT\_AGE), MAX(CURRENT\_AGE)*

*FROM PATIENT\_AGE;*

**MIN(CURRENT\_AGE) MAX(CURRENT\_AGE)**

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**2 51**

**--QUERY 3: Which clinic has the most patients with Meningitis?**

*CREATE VIEW CNT\_M\_PATIENT AS*

*SELECT CLINIC\_ID, COUNT(\*) AS CNT\_M\_PATIENT*

*FROM PATIENT*

*INNER JOIN MENINGITIS*

*ON PATIENT.PATIENT\_ID=MENINGITIS.PATIENT\_ID*

*WHERE MENINGITIS.MENINGITIS\_FLAG = 'Yes'*

*GROUP BY CLINIC\_ID;*

*CREATE VIEW MAX\_CNT\_M\_PATIENT AS*

*SELECT MAX(CNT\_M\_PATIENT) AS MAX\_CNT\_M\_PATIENT*

*FROM CNT\_M\_PATIENT;*

*CREATE VIEW CLINIC\_W\_MAX\_CNT\_M\_PATIENT AS*

*SELECT CNT\_M\_PATIENT.CLINIC\_ID FROM CNT\_M\_PATIENT*

*INNER JOIN MAX\_CNT\_M\_PATIENT*

*ON CNT\_M\_PATIENT.CNT\_M\_PATIENT=MAX\_CNT\_M\_PATIENT.MAX\_CNT\_M\_PATIENT;*

*SELECT CLINIC.\* FROM CLINIC*

*INNER JOIN CLINIC\_W\_MAX\_CNT\_M\_PATIENT*

*ON CLINIC.CLINIC\_ID=CLINIC\_W\_MAX\_CNT\_M\_PATIENT.CLINIC\_ID;*

**CL CLINIC\_NAME**

**-- ------------------------**

**C2 GOLDILOCKS CLINIC**

**--Query 4: Find each clinic with multiple interviewers**

*CREATE VIEW INTERVIEWER\_COUNT AS*

*SELECT CLINIC\_ID, COUNT(CLINIC\_ID) AS CNT\_CLINIC*

*FROM INTERVIEWER*

*GROUP BY CLINIC\_ID;*

*SELECT CLINIC.\* FROM INTERVIEWER\_COUNT*

*INNER JOIN CLINIC*

*ON INTERVIEWER\_COUNT.CLINIC\_ID=CLINIC.CLINIC\_ID*

*WHERE INTERVIEWER\_COUNT.CNT\_CLINIC > 1;*

**CL CLINIC\_NAME**

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**C1 REGIONS HOSPITAL**

**C3 SCRANTON CLINIC**

**C4 CRYSTAL BLUE CLINIC**

**--Query 5: Find the interviewer with the most patients interviewed (distinct patients)**

*CREATE VIEW PAT\_INT\_PAIR AS*

*SELECT PATIENT\_ID, INTERVIEWER\_ID FROM RECORD*

*GROUP BY PATIENT\_ID, INTERVIEWER\_ID;*

*CREATE VIEW PAT\_INT\_CNT AS*

*SELECT INTERVIEWER\_ID, COUNT(INTERVIEWER\_ID) AS CNT\_INTERVIEWER*

*FROM PAT\_INT\_PAIR*

*GROUP BY INTERVIEWER\_ID;*

*CREATE VIEW MAX\_CNT\_PAT\_INT\_CNT AS*

*SELECT MAX(CNT\_INTERVIEWER) AS MAX\_CNT\_INTERVIEWER*

*FROM PAT\_INT\_CNT;*

*SELECT PAT\_INT\_CNT.INTERVIEWER\_ID*

*FROM PAT\_INT\_CNT*

*INNER JOIN MAX\_CNT\_PAT\_INT\_CNT*

*ON PAT\_INT\_CNT.CNT\_INTERVIEWER=MAX\_CNT\_PAT\_INT\_CNT.MAX\_CNT\_INTERVIEWER;*

**IN**

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**I4**

**--Query 6: Find each patient whose mother and father are patients**

*CREATE VIEW PAT\_PARENT\_PAT\_CNT AS*

*SELECT PATIENT\_ID, COUNT(\*) AS P\_PARENT\_CNT*

*FROM RELATIVE*

*WHERE RELATION in ('Mother','Father') AND IS\_PATIENT\_FLAG = 1*

*GROUP BY PATIENT\_ID;*

*SELECT PATIENT\_ID FROM PAT\_PARENT\_PAT\_CNT*

*WHERE P\_PARENT\_CNT = 2;*

**PAT**

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**P06**

**--Query 7: How common is it among patients to be born with Meningitis?**

*CREATE VIEW PAT\_CNT AS*

*SELECT '1' AS CNT\_ID, COUNT(\*) AS CNT*

*FROM MENINGITIS;*

*CREATE VIEW MEN\_PAT\_CNT AS*

*SELECT '1' AS CNT\_ID, COUNT(\*) AS CNT*

*FROM MENINGITIS*

*WHERE MENINGITIS\_FLAG = 'Yes';*

*SELECT MEN\_PAT\_CNT.CNT/PAT\_CNT.CNT AS PERC\_MEN\_PAT*

*FROM PAT\_CNT*

*JOIN MEN\_PAT\_CNT*

*ON PAT\_CNT.CNT\_ID = MEN\_PAT\_CNT.CNT\_ID;*

**PERC\_MEN\_PAT**

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**.5**

**-- Query 8: Find each patient who is adopted and is female**

*SELECT PATIENT\_ID FROM DEMOGRAPHICS*

*WHERE ADOPTION\_STATUS = 'adopted' AND GENDER = 'F';*

**PAT**

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**P04**

**-- Query 9: Find each patient whose walk age is younger than say words age.**

*CREATE VIEW REC\_WALK\_BF\_WORD AS*

*SELECT RECORD\_ID FROM DEVELOP\_HISTORY*

*WHERE WALK\_AGE < WORD\_AGE;*

*SELECT RECORD.PATIENT\_ID FROM RECORD*

*JOIN REC\_WALK\_BF\_WORD*

*ON RECORD.RECORD\_ID = REC\_WALK\_BF\_WORD.RECORD\_ID;*

**PATI**

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**P05**

**P09**

**-- Query 10: What is the most common chief complaint?**

*CREATE VIEW CNT\_CHIEF\_COMPLAINT AS*

*SELECT CHIEF\_COMPLAINT, COUNT(\*) AS CNT*

*FROM DEMOGRAPHICS*

*GROUP BY CHIEF\_COMPLAINT;*

*CREATE VIEW MAX\_CNT\_CHIEF\_COMPLAINT AS*

*SELECT MAX(CNT) AS MAX\_CNT*

*FROM CNT\_CHIEF\_COMPLAINT;*

*SELECT CNT\_CHIEF\_COMPLAINT.CHIEF\_COMPLAINT*

*FROM CNT\_CHIEF\_COMPLAINT*

*JOIN MAX\_CNT\_CHIEF\_COMPLAINT*

*ON CNT\_CHIEF\_COMPLAINT.CNT = MAX\_CNT\_CHIEF\_COMPLAINT.MAX\_CNT;*

**CHIEF\_COMPLAINT**

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**Articulation Problems**

**--Query 11: Find each record with evidence of UAO or evidence of otitic history but not both.**

*CREATE VIEW UAO\_AND\_OTITIC AS*

*(SELECT RECORD\_ID FROM UAO*

*WHERE EVIDENCE\_UAO = 'Yes')*

*INTERSECT*

*(SELECT RECORD\_ID FROM OTITIC*

*WHERE EVIDENCE\_OTITIC = 'Yes');*

*CREATE VIEW UAO\_AND\_OR\_OTITIC AS*

*(SELECT RECORD\_ID FROM UAO*

*WHERE EVIDENCE\_UAO = 'Yes')*

*UNION*

*(SELECT RECORD\_ID FROM OTITIC*

*WHERE EVIDENCE\_OTITIC = 'Yes');*

*SELECT \* FROM UAO\_AND\_OR\_OTITIC*

*MINUS*

*SELECT \* FROM UAO\_AND\_OTITIC;*

**REC**

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**R01**

**R05**

**R07**

**R09**

**R11**

**--Query 12: Find the youngest patient**

*CREATE VIEW YOUNGEST\_PAT AS*

*SELECT MAX(DATE\_OF\_BIRTH) AS YOUNG\_DATE\_OF\_BIRTH*

*FROM DEMOGRAPHICS;*

*SELECT DEMOGRAPHICS.PATIENT\_ID*

*FROM DEMOGRAPHICS*

*INNER JOIN YOUNGEST\_PAT*

*ON DEMOGRAPHICS.DATE\_OF\_BIRTH = YOUNGEST\_PAT.YOUNG\_DATE\_OF\_BIRTH;*

**PAT**

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**P06**

**--Query 13: Find each complaint with only one patient**

*CREATE VIEW COMPLAINT\_CNT AS*

*SELECT CHIEF\_COMPLAINT, COUNT(\*) AS CNT\_PAT*

*FROM DEMOGRAPHICS*

*GROUP BY CHIEF\_COMPLAINT;*

*SELECT CHIEF\_COMPLAINT*

*FROM COMPLAINT\_CNT*

*WHERE CNT\_PAT = 1;*

**CHIEF\_COMPLAINT**

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**High risk patent**

**Family history of hearing loss**

**Failed school screen**

**Psychiatric in-patient**

**Cleft palate patient**

**Suspected hearing loss**

**Known hearing loss**

**Speech delay**

**--Query 14: Find each medical condition type associated with only one patient**

*CREATE VIEW REC\_PAT\_MC\_COUNT AS*

*SELECT RECORD.PATIENT\_ID, MC\_FINDING.MC\_TYPE, COUNT(\*) AS CNT*

*FROM MC\_FINDING*

*INNER JOIN RECORD*

*ON MC\_FINDING.RECORD\_ID = RECORD.RECORD\_ID*

*GROUP BY RECORD.PATIENT\_ID, MC\_FINDING.MC\_TYPE;*

*CREATE VIEW MC\_PAT\_CNT AS*

*SELECT MC\_TYPE, COUNT(\*) AS MC\_PAT\_CNT*

*FROM REC\_PAT\_MC\_COUNT*

*GROUP BY MC\_TYPE;*

*SELECT MC\_TYPE FROM MC\_PAT\_CNT*

*WHERE MC\_PAT\_CNT = 1;*

**MC\_TYPE**

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**Exam Anxiety**

**Baseball Withdrawal**

**Lung Cancer**

**Muscular Dystrophy**

**-- Query 15: What is the date of the last ear infection for the patient with the highest lifetime total of ear infections?**

*CREATE VIEW MAX\_LTI\_TOTAL AS*

*SELECT MAX(LIFETIME\_TOTAL\_INFECTION) AS MAX\_LTI\_TOTAL*

*FROM OTITIC;*

*SELECT OTITIC.LAST\_EAR\_INFECTION FROM OTITIC*

*INNER JOIN MAX\_LTI\_TOTAL*

*ON OTITIC.LIFETIME\_TOTAL\_INFECTION = MAX\_LTI\_TOTAL.MAX\_LTI\_TOTAL;*

**LAST\_EAR\_**

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**01-JAN-08**