Simple Queries

```
SELECT *
FROM IncidentLog
WHERE natureOfIncident REGEXP 'Complaint';
```

incidentID	incidentDateTime	natureOfIncident	actionsTaken	visitID	staffInvolved
5	2022-07-18 23:22:46	Complaint	incident report filed	61	2
6	2022-07-05 04:57:47	Complaint	police called	39	9
8	2022-05-17 22:33:14	Complaint	Resolved on premises	21	27
13	2022-04-03 13:58:53	Complaint	warning issued	7	22
155	2022-08-12 21:37:32	Complaint	upper management	62	18
351	2022-05-20 07:16:08	Complaint	police called	43	1
523	2022-04-08 06:52:27	Complaint	incident report filed	87	90
749	2022-11-09 13:55:29	Complaint	no action taken	2	97
886	2022-08-05 09:59:40	Complaint	no action taken	51	92
1896	2022-10-02 10:48:45	Complaint	police called	18	68
5729	2022-02-07 13:23:54	Complaint	police called	73	34
78323	2022-03-24 03:13:18	Complaint	police called	71	113

```
SELECT *
FROM Patient
WHERE gender = 'F'
AND birthDate > '2002-01-01';
```

patientID	fName	lName	birthDate	gender	phoneNumber	medicalHistory
1	Josie	Carette	2002-08-11	F	8677889323	Nam ultrices, libero non mattis pulvinar, nulla pe…
5	Estella	Cajkler	2006-02-13	F	1397362819	Quisque id justo sit amet sapien dignissim vesti…
24	Chantalle	Knappitt	2008-05-01	F	4064880476	Duis bibendum, felis sed interdum venenatis, tur…
32	Becka	McMechan	2004-11-11	F	3104580259	Morbi porttitor lorem id ligula. Suspendisse orna…
37	Blanca	Bengoechea	2021-09-29	F	9225828789	Nulla ut erat id mauris vulputate elementum. Nul…
39	Malissa	Grinval	2019-06-06	F	7188465226	Proin interdum mauris non ligula pellentesque ul…
40	Aurelie	Spurling	2007-10-13	F	6588512354	Etiam vel augue. Vestibulum rutrum rutrum neq…
66	Zena	Elstub	2004-02-25	F	6404338820	In sagittis dui vel nisl. Duis ac nibh. Fusce lacus…
71	Bernie	Caldicott	2018-11-28	F	9724995399	Proin interdum mauris non ligula pellentesque ul…
76	Rozina	Spalding	2015-01-24	F	8358580162	Nam ultrices, libero non mattis pulvinar, nulla pe…
82	Roslyn	Fishbourn	2015-06-20	F	1277757798	Curabitur gravida nisi at nibh. In hac habitasse…
85	Bibbie	Cornelisse	2003-03-30	F	5594404889	Aliquam quis turpis eget elit sodales scelerisque…

```
SELECT providerID, providerName
FROM MedicalProvider med
WHERE NOT EXISTS (SELECT *
FROM Prescription p
WHERE p.prescribingPhysician = med.providerID);
```

providerID	providerName
0	Kev Graffin
2	Valerye Helis
3	Willette MacCaffery
7	Laural Reddyhoff
9	Kamila Baggarley
15	Sephira Weems
19	Lil Kinver
46	Alyson Tobias
89	Waverley Andreasen
183	Zacharie Janczewski
268	Ingra Halgarth
407	Michael Hoffman

```
SELECT AVG(cost) AS avgOverduePayments
FROM Billing
WHERE paymentStatus = 'Overdue';
```

avgOverduePayments
490.3636

Complex Queries

SELECT initialAssessment, fName, lName, birthDate
FROM EmergencyVisit
JOIN Patient
ON EmergencyVisit.patientID = Patient.patientID
WHERE birthDate > '2000-01-01'
ORDER BY birthDate ASC;

initialAssessment	fName	lName	birthDate
Pathological fracture, unspecified tibia and fibula, sequela	Joachim	Bugden	2000-11-01
Unsp focal TBI w LOC of 30 minutes or less, subs	Joachim	Bugden	2000-11-01
Toxic effect of gases, fumes and vapors, undetermined, subs	Taite	Nother	2001-03-24
Nondisp fx of dist phalanx of unsp less toe(s), 7thD	Josie	Carette	2002-08-11
Coxa plana	Josie	Carette	2002-08-11
Prsn outsd pk-up/van inj in nonclsn trnsp acc nontraf, subs	Zena	Elstub	2004-02-25
Malar fracture, left side, init	Sheffield	Brogiotti	2004-10-18
Other skateboard accident, subsequent encounter	Sheffield	Brogiotti	2004-10-18
Toxic effect of venom of gila monster, assault	Estella	Cajkler	2006-02-13
Strain of flexor musc/fasc/tend at forearm level, right arm	Estella	Cajkler	2006-02-13
Toxic effect of carb monx from mtr veh exhaust, undet, sqla	Kaspar	Atherton	2007-02-14
Corrosion of left eye and adnexa, part unsp, subs encntr	Abrahan	Densell	2007-03-01

SELECT fName, lName, results, dateTimeOrdered
FROM DiagnosticTest
JOIN EmergencyVisit
ON DiagnosticTest.emergencyVisitID = EmergencyVisit.visitID
JOIN Patient
ON EmergencyVisit.patientID = Patient.patientID
WHERE testType = 'ultrasound';

fName	lName	results	dateTimeOrdered
Grantham	MacGibbon	positive	2022-07-29 05:21:56
Bartolemo	Bosse	negative	2022-04-07 22:55:54
Aleen	Hierro	positive	2022-04-08 16:24:27
Willow	Dundendale	negative	2022-12-25 17:56:20
Grantham	MacGibbon	negative	2022-08-26 01:53:32
Teirtza	Girvan	inconclusive	2022-11-22 01:22:20
Moss	Girodias	negative	2022-02-11 06:52:06
Clark	Marcus	negative	2022-03-27 23:40:52

```
SELECT EmergencyVisit.patientID, COUNT(EmergencyVisit.patientID) AS VisitCount
FROM EmergencyVisit
JOIN Patient
ON EmergencyVisit.patientID = Patient.patientID
GROUP BY patientID
ORDER BY VisitCount DESC;
```

patientID	VisitCount
88	3
126	3
43	3
14	3
107	3
49	2
80	2
134	2
41	2
44	2
1	2
110	2

```
SELECT Billing.paymentStatus, SUM(cost) AS totalCost, fName, lName,
EmergencyVisit.patientID
FROM Billing
JOIN EmergencyVisit
ON Billing.visitID = EmergencyVisit.visitID
JOIN Patient
ON EmergencyVisit.patientID = Patient.patientID
WHERE Billing.paymentStatus = 'Overdue'
GROUP BY EmergencyVisit.patientID
HAVING totalCost > 500
ORDER BY totalCost DESC;
```

paymentStatus	totalCost	fName	lName	patientID
Overdue	2013	Antonetta	Magson	43
Overdue	1630	Candy	MacConchie	126
Overdue	1561	Guntar	Tissell	124
Overdue	1326	Kip	Doby	110
Overdue	1012	Gerta	Mains	25
Overdue	904	Corene	Stilldale	88
Overdue	882	Brander	O'Flaherty	87
Overdue	867	Taite	Nother	62
Overdue	764	Hamish	Symper	122
Overdue	763	Mercie	Benoit	131
Overdue	763	Christab…	Fernez	46
Overdue	757	Georgie	Pinchin	114

```sql
SELECT p.patientID, p.fName, p.lName,
(SELECT AVG(prescriptionCount) FROM (SELECT COUNT(*)AS prescriptionCount
FROM Prescription prescript WHERE prescript.patientID = p.patientID
GROUP BY p.patientID) AS presciptCount) AS avgScripts
FROM Patient p
ORDER BY avgScripts DESC;
```

patientID	fName	lName	avgScripts
1	Josie	Carette	8.0000
83	Nollie	Bartley	7.0000
64	Clark	Marcus	6.0000
72	Franklin	Crutch	6.0000
2	Elston	Melross	5.0000
5	Estella	Cajkler	5.0000
18	Hildy	Lakenton	5.0000
21	Rosaline	Lailey	5.0000
26	Winne	Hubble	5.0000
60	Inglebert	Kruszelnicki	5.0000
79	Odetta	Mattiazzo	5.0000
96	Stanford	Defond	5.0000

```sql
SELECT SUM(Billing.cost) AS TotalCosts, YEAR(EmergencyVisit.arrivalDateTime) AS
YearTotal
FROM Billing
JOIN EmergencyVisit
ON Billing.visitID = EmergencyVisit.visitID
JOIN Clinic
ON EmergencyVisit.clinicID = Clinic.clinicID
WHERE Billing.paymentStatus = 'Paid'
GROUP BY YEAR(arrivalDateTime)
ORDER BY YEAR(arrivalDateTime) ASC;
```

TotalCosts	YearTotal
6264	2021
4157	2022
6279	2023

	Query 1 (SQ)	Query 2 (SQ)	Query 3 (SQ)	Query 4 (SQ)	Query 5 (CQ)	Query 6 (CQ)	Query 7 (CQ)	Query 8 (CQ)	Query 9 (CQ)	Query 10 (CQ)
Multiple Table Join					X	X	X	X	X	X
Subquery									X	
Correlated Subquery			X							
Group By							X		X	X
GROUP BY with HAVING								X		
Multi condition WHERE		X			X					
BUILT-IN Functions/ Calculated Field				X			X		X	X
REGEXP	X									
NOT EXISTS			X							