SQL Queries For Hospital Database

1) Calculates the total of the bill per patient and deducts the insurance

```
1     SELECT
2           b.billing_id,
3           b.patient_id,
4           appointment.appointment_fee,
5           prescription.prescription_fee,
6           insurance.co_pay as deductible,
7           IF((COALESCE(appointment.appointment_fee, 0) + COALESCE(prescription.prescription_fee, 0) - COALESCE(insurance.co_pay, 0)) < 0, 0,
8           (COALESCE(appointment.appointment_fee, 0) + COALESCE(prescription.prescription_fee, 0) - COALESCE(insurance.co_pay, 0))) AS total
9     FROM billing b
10    INNER JOIN appointment ON b.appointment_id = appointment.appointment_id
11    RIGHT JOIN prescription ON b.prescription_id = prescription.prescription_id
12    RIGHT JOIN insurance ON b.insurance_id = insurance.insurance_id;
13
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: IA

billing_id	patient_id	appointment_fee	prescription_fee	deductible	total
100	1	50.00	NULL	100.00	0
101	2	50.00	80.00	250.00	0
105	6	50.00	100.00	50.00	100.00

2) Finds the doctor's first name, last name, doctor id, and specialization

```
1     SELECT
2           user.first_name,
3           user.last_name,
4           d.doctor_id,
5           d.specialization
6     FROM doctor d
7     INNER JOIN user ON user.user_id = d.user_id;
```

Result Grid | Filter Rows: | Export: | Wrap C

first_name	last_name	doctor_id	specialization
Daphene	Higgs	100	General Medicine
Jake	Smith	101	Urology
Lesie	Maxwell	102	Orthopedics
Abel	William	103	Pediatrics
Carlos	Vargas	104	Gastroenterology
Jackson	Haven	105	General Medicine
Naomi	Rodriguez	106	Hematology
Violet	Elrod	107	Ophtalmology

3) Match the doctor to the disease

```sql
1  ● SELECT
2         user.first_name,
3         user.last_name,
4         d.doctor_id,
5         d.specialization,
6         disease.disease_name
7     FROM doctor d
8     INNER JOIN user ON user.user_id = d.user_id
9     RIGHT JOIN doctor_disease ON doctor_disease.doctor_id = d.doctor_id
10    INNER JOIN disease ON disease.disease_id = doctor_disease.disease_id;
```

first_name	last_name	doctor_id	specialization	disease_name
Daphene	Higgs	100	General Medicine	Flu
Abel	William	103	Pediatrics	Flu
Jackson	Haven	105	General Medicine	Flu
Daphene	Higgs	100	General Medicine	COVID
Abel	William	103	Pediatrics	COVID
Jackson	Haven	105	General Medicine	COVID
Daphene	Higgs	100	General Medicine	Pneumonia
Jackson	Haven	105	General Medicine	Pneumonia
Carlos	Vargas	104	Gastroenterology	Malaria
Naomi	Rodriguez	106	Hematology	HIV/AIDS
Naomi	Rodriguez	106	Hematology	Tuberculosis
Carlos	Vargas	104	Gastroenterology	E.coli
Daphene	Higgs	100	General Medicine	Common cold
Abel	William	103	Pediatrics	Common cold
Jackson	Haven	105	General Medicine	Common cold
Lesie	Maxwell	102	Orthopedics	Lyme disease
Jake	Smith	101	Urology	STDs
Abel	William	103	Pediatrics	Asthma

4) Reveals the symptoms, severity level, and name of the patient

```sql
1  ● SELECT
2         user.first_name,
3         user.last_name,
4         p.severity_level,
5         symptom.symptom_name
6     FROM patient p
7     INNER JOIN user ON user.user_id = p.user_id
8     RIGHT JOIN patient_symptom ON patient_symptom.patient_id = p.patient_id
9     INNER JOIN symptom ON symptom.symptom_id = patient_symptom.symptom_id;
```

first_name	last_name	severity_level	symptom_name
Lele	Ponce	low	Fever
Zack	Zeigler	moderate	Diarrhea
Jack	Jeff	high	Diarrhea
Lele	Ponce	low	Fatigue
Scarlett	Rose	high	Headache
Marie	Zeigler	low	Headache
Lele	Ponce	low	Cough
Marie	Zeigler	low	Cough
Marie	Zeigler	low	Sore throat
Billy	Bob	moderate	Nausea
Jack	Jeff	high	Nausea
Billy	Bob	moderate	Vomiting
Zack	Zeigler	moderate	Vomiting
Scarlett	Rose	high	Shortness of b…
Billy	Bob	moderate	Joint pain
Billy	Bob	moderate	Weight loss or …
Zack	Zeigler	moderate	Weight loss or …
Scarlett	Rose	high	Difficult sleeping
Jack	Jeff	high	Difficult sleeping
Scarlett	Rose	high	Memory proble…
Zack	Zeigler	moderate	Change in bow…
Jack	Jeff	high	Change in bow…
Jack	Jeff	high	Pelvic pain
Scarlett	Rose	high	Dizziness
Scarlett	Rose	high	Sudden numbn…