Hospital

Exploratory Data Analysis

Level Easy

1) Show First name, last name , and gender of the patient whose gender is ‘M’ ?

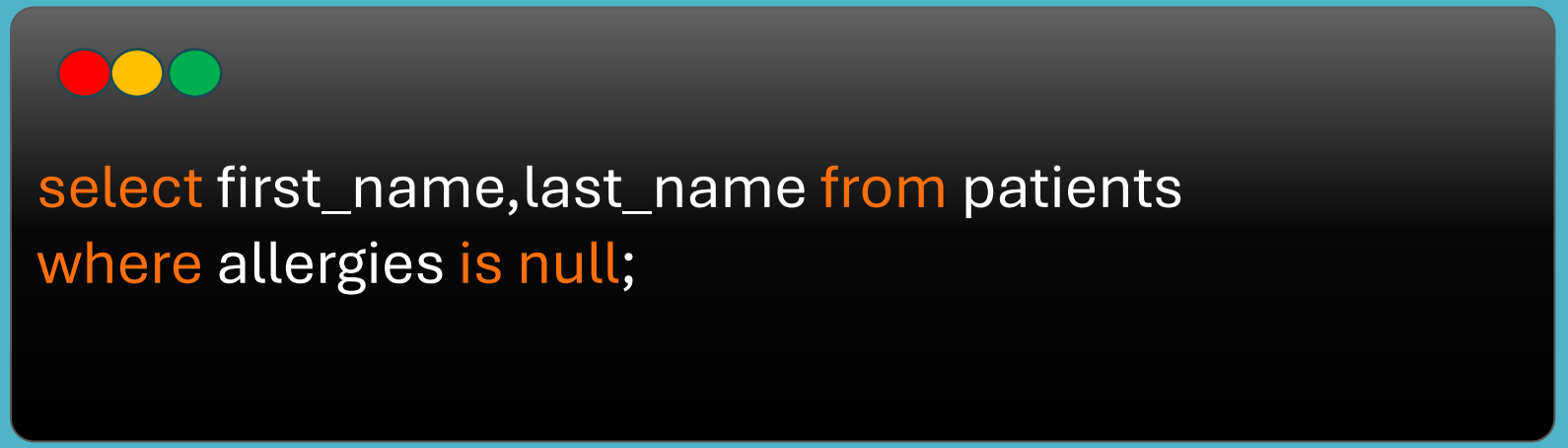
```
SELECT first_name,last_name,gender FROM patients
where gender like "m%“;
```

Hospital

Exploratory Data Analysis

Level Easy

2) Show first name and last name of patients who does not have allergies. (null)



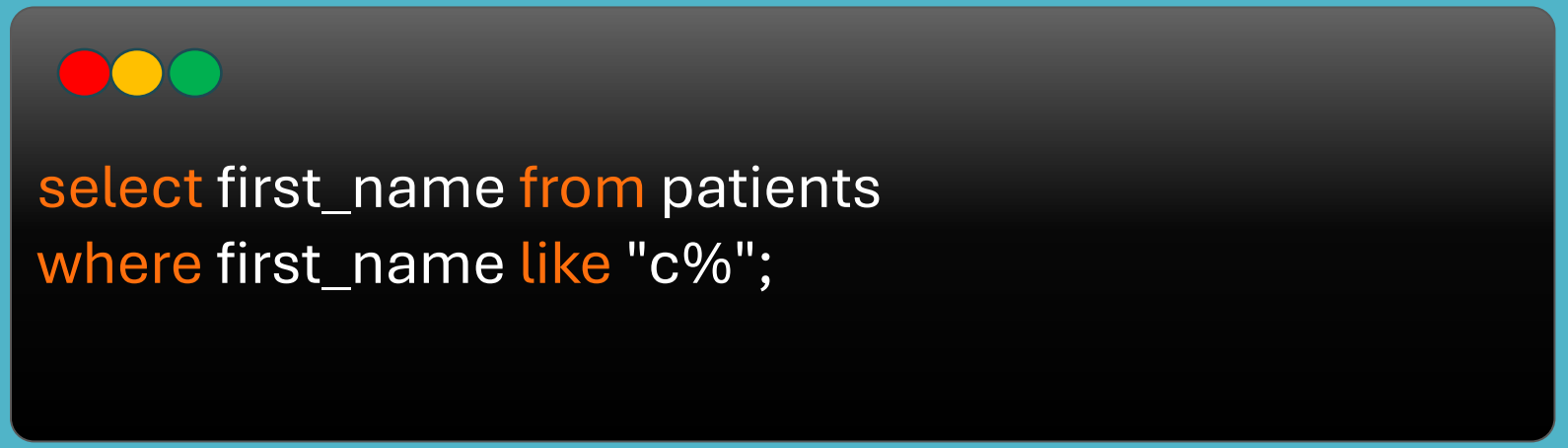
```
select first_name,last_name from patients
where allergies is null;
```

Hospital

Exploratory Data Analysis

Level Easy

3) Show first name of patients that start with the letter 'C'



```
select first_name from patients
where first_name like "c%";
```

Hospital

Exploratory Data Analysis

Level Easy

4) Show first name and last name of patients that weight within the range of 100 to 120 (inclusive)

```
select first_name,last_name weight from patients
where weight between "100" and "120" ;
```

Hospital

Exploratory Data Analysis

Level Easy

5) Write a query to find list of patients first_name, last_name, and allergies from Hamilton where allergies are not null

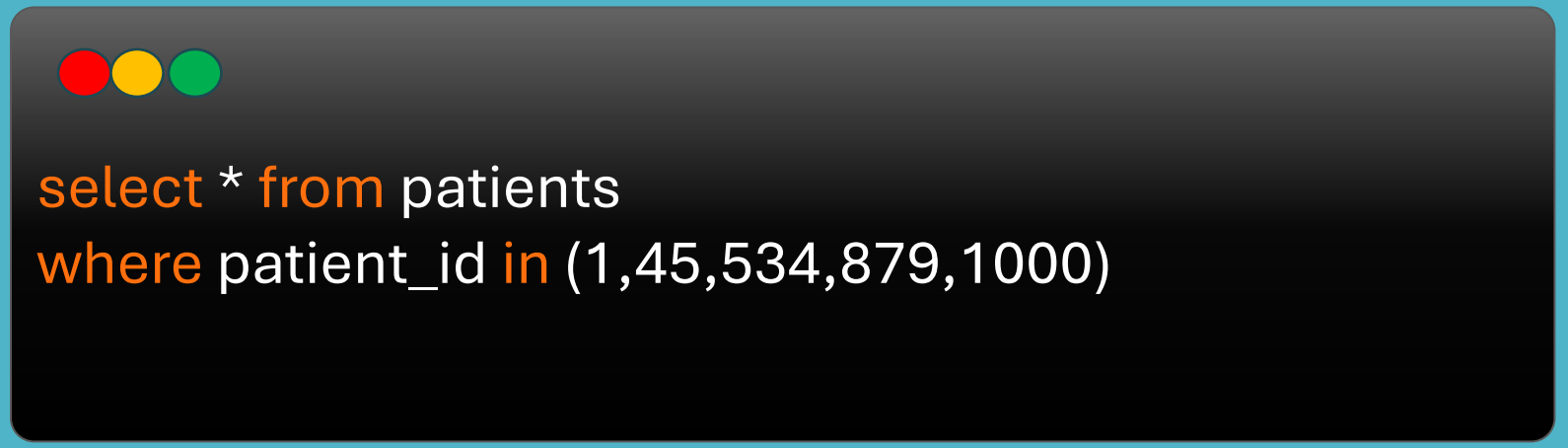
```
select  first_name,last_name,allergies
from patients
where city = 'Hamilton'
and allergies is not null;
```

Hospital

Exploratory Data Analysis

Level Easy

6) Show all columns for patients who have one of the following patient_ids:
1,45,534,879,1000



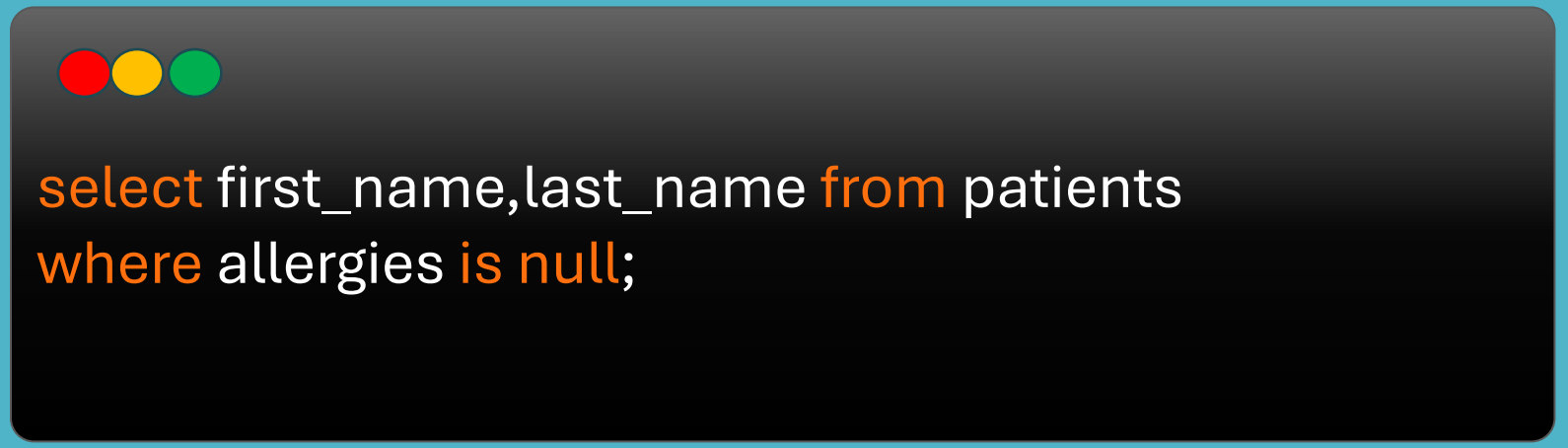
```
select * from patients
where patient_id in (1,45,534,879,1000)
```

Hospital

Exploratory Data Analysis

Level Medium

2) Show first name and last name of patients who does not have allergies. (null)



```
select first_name,last_name from patients
where allergies is null;
```

Hospital

Exploratory Data Analysis

Level Medium

Display patient's full name, height in the units feet rounded to 1 decimal, weight in the unit pounds rounded to 0 decimals,birth_date,gender non abbreviated.

Convert CM to feet by dividing by 30.48.

Convert KG to pounds by multiplying by 2.205.

```
select
   concat(first_name, ' ', last_name) AS 'patient_name',
   ROUND(height / 30.48, 1) as 'height "Feet"',
   ROUND(weight * 2.205, 0) AS 'weight "Pounds"', birth_date,
CASE
       WHEN gender = 'M' THEN 'MALE'
  ELSE 'FEMALE'
END AS 'gender_type'
from patients
```

Hospital

Exploratory Data Analysis

Level Medium

Show patient_id, first_name, last_name from patients whos diagnosis is 'Dementia'.

Primary diagnosis is stored in the admissions table.

```
select p.patient_id,p.first_name,p.last_name from patients p
join  admissions a
on p.patient_id = a.patient_id
where diagnosis = 'Dementia';
```

Hospital

Exploratory Data Analysis

Level Medium

For every admission, display the patient's full name, their admission diagnosis, and their doctor's full name who diagnosed their problem.

```
select
concat(p.first_name,' ',p.last_name)as patient_name,
a.diagnosis,
concat(d.first_name,' ',d.last_name)as doctors_name
from patients p
join admissions a
on p.patient_id = a.patient_id
join doctors d
on a.attending_doctor_id = d.doctor_id;
```

Hospital

Exploratory Data Analysis

Level Hard

Show patient_id, attending_doctor_id, and diagnosis for admissions that match one of the two criteria:

1. patient_id is an odd number and attending_doctor_id is either 1, 5, or 19.
2. attending_doctor_id contains a 2 and the length of patient_id is 3 characters.

```
SELECT patient_id, attending_doctor_id, diagnosis
FROM admissions
WHERE
 ( attending_doctor_id IN (1, 5, 19)  AND patient_id % 2 != 0 ) OR
 (attending_doctor_id LIKE '%2%'
  AND len(patient_id) = 3 );
```

Hospital

Exploratory Data Analysis

Level Hard

Show patient_id, first_name, last_name, and attending doctor's specialty.
Show only the patients who has a diagnosis as 'Epilepsy' and the doctor's first name is 'Lisa'
Check patients, admissions, and doctors tables for required information.

```
select p.patient_id,p.first_name,p.last_name,d.specialty as
doctors_specialty
from  patients p
join admissions a
on p.patient_id = a.patient_id
join doctors d
on a.attending_doctor_id = d.doctor_id
where diagnosis = 'Epilepsy' and d.first_name = 'Lisa';
```

Hospital

Exploratory Data Analysis

Level Hard

All patients who have gone through admissions, can see their medical documents on our site. Those patients are given a temporary password after their first admission. Show the patient_id and temp_password.

The password must be the following, in order:

1. patient_id 2. the numerical length of patient's last_name 3. year of patient's birth_date

```
select p.patient_id,
concat(p.patient_id,len(p.last_name),
year(p.birth_date))as temp_password
from patients p
join admissions a
on a.patient_id = p.patient_id
group by p.patient_id
```

Hospital

Exploratory Data Analysis

Level Hard

Each admission costs $50 for patients without insurance, and $10 for patients with insurance. All patients with an even patient_id have insurance.

Give each patient a 'Yes' if they have insurance, and a 'No' if they don't have insurance. Add up the admission total cost for each has insurance group.

```
SELECT
CASE WHEN patient_id % 2 = 0 Then
   'Yes'
ELSE
   'No'
END as has_insurance,
SUM(CASE WHEN patient_id % 2 = 0 Then
   10
ELSE
   50
END) as cost_after_insurance
FROM admissions
GROUP BY has_insurance;
```

Hospital

Exploratory Data Analysis

Level Hard

We are looking for a specific patient. Pull all columns for the patient who matches the following criteria:

- First_name contains an 'r' after the first two letters.
- Identifies their gender as 'F'
- Born in February, May, or December
- Their weight would be between 60kg and 80kg
- Their patient_id is an odd number
- They are from the city 'Kingston'

Hospital

Exploratory Data Analysis

```
SELECT *
FROM patients
WHERE
 first_name LIKE '__r%'
 AND gender = 'F'
 AND MONTH(birth_date) IN (2, 5, 12)
 AND weight BETWEEN 60 AND 80
 AND patient_id % 2 = 1
 AND city = 'Kingston';
```