**Hospital Data Analytics: SQL queries – Level Medium**

**Show all patient's first\_name, last\_name, and birth\_date who were born in the 1970s decade. Sort the list starting from the earliest birth\_date**.

SELECT first\_name, last\_name, birth\_date from patients

where YEAR(birth\_date) >=1970 and YEAR(birth\_date) <=1979

order by birth\_date ASC

**We want to display each patient's full name in a single column. Their last\_name in all upper letters must appear first, then first\_name in all lower case letters. Separate the last\_name and first\_name with a comma. Order the list by the first\_name in decending order  
EX: SMITH,jane**

SELECT CONCAT(upper(last\_name),',',lower(first\_name))

FROM

patients

order by first\_name desc

**Show the province\_id(s), sum of height; where the total sum of its patient's height is greater than or equal to 7,000.**

SELECT province\_id, sum(height)

from

patients

group by province\_id

having sum(height)>=7000

**Show the difference between the largest weight and smallest weight for patients with the last name 'Maroni'**

SELECT max(weight)-min(weight)

from

patients

where last\_name='Maroni'

**Show all of the days of the month (1-31) and how many admission\_dates occurred on that day. Sort by the day with most admissions to least admissions.**

SELECT

DAY(admission\_date), count(admission\_date)

from

admissions

group by DAY(admission\_date)

order by count(admission\_date) desc

**Show all columns for patient\_id 542's most recent admission\_date.**

SELECT

\*

FROM

admissions

where patient\_id = 542

order by admission\_date desc

limit 1

**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

(mod(patient\_id,2)<>0 AND

attending\_doctor\_id in (1,5,19))

OR (len(patient\_id) = 3

AND attending\_doctor\_id like '%2%'

)

**Show first\_name, last\_name, and the total number of admissions attended for each doctor.  
  
Every admission has been attended by a doctor.**

SELECT doctors.first\_name,

doctors.last\_name,

count(admissions.admission\_date)

FROM doctors

left join

admissions

on doctors.doctor\_id=admissions.attending\_doctor\_id

group by

doctors.first\_name, doctors.last\_name