

## Classroom Problems 4 Sep

#Q. Identify the top 3 preferred insurance providers among patients

```
select Insurance_Provider, count(Admission_ID) as patient_count, count(Age)
from `hospital.hospital`
group by Insurance_Provider
order by patient_count desc
limit 3
```

#Q. Determine the count of universal blood donors and recipients within the patient population.

-- look for o- and AB+

```
select Blood_Type, count(admission_id) as patient_count
from `hospital.hospital`
where Blood_Type in ('O-','AB+')
group by Blood_Type
```

#Q. How many patients fall into different BMI categories (underweight, normal weight, overweight, obese)?

-- 18.5 , 18.5-24.9, 25-29.9, 29.9 onwards

-- case-when, count(), group by

```
select
case
when BMI <= 18.5 then 'underweight'
when BMI > 18.5 and BMI <= 24.9 then 'normal weight'
when BMI > 24.9 and BMI <= 29.9 then 'overweight'
else 'obese'
end as bmi_category, count(Admission_ID)
from `hospital.hospital`
group by bmi_category
```

#Q. Which ethnic group exhibits the highest susceptibility to cancer?

```
select
Ethnicity as ethnic_group, count(Admission_ID) as patient_count
from `hospital.hospital`
where Medical_Condition = 'Cancer'
group by ethnic_group
order by patient_count desc
limit 1
```

#Q. Find the most frequently prescribed medication for specific medical conditions.

```
select Medical_Condition, Medication, count(Admission_ID) as patient_count
from `hospital.hospital`
group by Medical_Condition, Medication
order by patient_count desc
```

# Which medication is prescribed less than 5 times

```
select Medication, count(Admission_ID) as patient_count
from `hospital.hospital`
group by Medication
having count(Admission_ID) < 8100
order by patient_count
```

```
select Medication, count(Admission_ID) as patient_count
from `hospital.hospital`
group by Medication
having patient_count < 8100
order by patient_count
```

#Q. Identify doctors who have treated more than 10 patients.

```
select Doctor, count(Admission_ID) as count_patient
from
`hospital.hospital`
group by Doctor
having count_patient > 10
order by count_patient
```

#Q. List medical conditions that have an average hospitalization period greater than 15 days and where the maximum billing amount exceeds \$25,000

```
select Medical_Condition, avg(Days_Hospitalised),
max(Billing_Amount)
from `hospital.hospital`
group by Medical_Condition
having avg(Days_Hospitalised) > 15 and
max(Billing_Amount) > 25000
```

#Q. Find hospitals where the average billing amount exceeds the overall average billing amount by at least 50%.

```
select Hospital, avg(Billing_Amount)
from `hospital.hospital`
group by Hospital
having avg(Billing_Amount) >
(select avg(Billing_Amount) * 1.5
from `hospital.hospital`)
```

# H.W: find out average billing of all insurance provider where each hospitalisation is more than 5 days and avg billing cost is greater than 10,000