* **CASE STUDY 1**

The event is the *record of job data* for the month of *November* of different *actors*, who spoke different *languages* and the decision on their job interviews that whether it is *skip*/*transfer* or left to take *decision* on it.

Used MySQL for performing operations on this Case Study.

Q.A) SELECT job\_id COUNT(job\_id)

FROM job\_data

WHERE ds BETWEEN ‘2020-11-01’ AND ‘2020-11-30’

Q.B) Will be considering the language for selecting the average throughput of the 7 days.  
 I would prefer daily metrics because the data for each day is changing with different candidates for the job.

Q.C) select language , count(\*) \* 100.0 / sum(count(\*)) over()

from job\_data

group by Grade

Q.D) To get the duplicates in the table:

SELECT \* COUNT(\*)

FROM job\_data

HAVING COUNT (\*) > 1

* **CASE STUDY 2**

The data is the record for the Users account and their *Details* , the various *activities in which they were engaged or participated* and last table contains data specifically related to the *Sending of Emails*.

Used Microsoft Excel for performing operations on this Case Study.

QA.)Weekly User Engagement of the Users is defined by taking all the data in the Table in MS Excel and inserting a Pivot Table with it.  
Now we can select ‘Months’ and ‘Occurred at’ under ‘Rows’ and Count of Event type under Values.  
From there we can get the *weekly user engagement.*

QB.)User Growth for product can be seen by the same above procedure because the Increase in User Engagement tells us the growth for product by the users.  
Here to calculate the user growth we can additionally see the increase in number of counts in the user engagement per month or weekly basis, that count will tell us about the User Growth for Product.

QC.)From the Data in the table 2, we can create a Pivot table, where event\_type will be under Columns, Months and event\_name under Rows and ‘count of event\_name’ under values.  
Now this data will represent the User-SignUp metrics.

QD.)For calculating the Weekly Engagement per Device, we can create a Pivot table from the given data, where we will select *Event\_type* as Filters, Device under Rows, Months under Columns and lastly ‘count of *Occurred\_at’* under Values.  
This will give us the Weekly Engagement per device data in our MS Excel Sheet.

QE.)For calculating the E-Mail Engagement Metrics from the table 3, we can create a pivot table from the given data in table 3, and then after we can put Months under Rows, action under columns and ‘count of *occurred\_at*’ under Values.  
This will give us the different email activities like, sent\_weekly\_digest, email\_open, email\_clickthrough, etc , that will further tell us how the ‘**email engagement’ works among the users.**

Given the link of Excel Sheets showing the operations performed on these case studies to obtain the solutions. ->

https://drive.google.com/drive/folders/1idZgAb8YfUv\_Fh9q9uQwQf98Mo241It5?usp=sharing