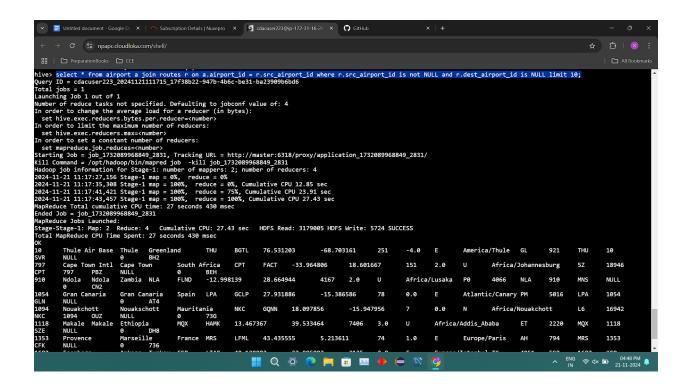
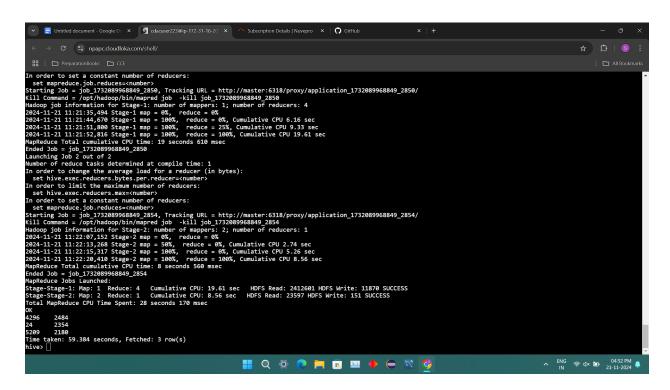
HIVE

Question 1:

1) Query-select * from airport a join routes r on a.airport_id =
 r.src_airport_id where r.src_airport_id is not NULL and
 r.dest airport id is NULL limit 10;



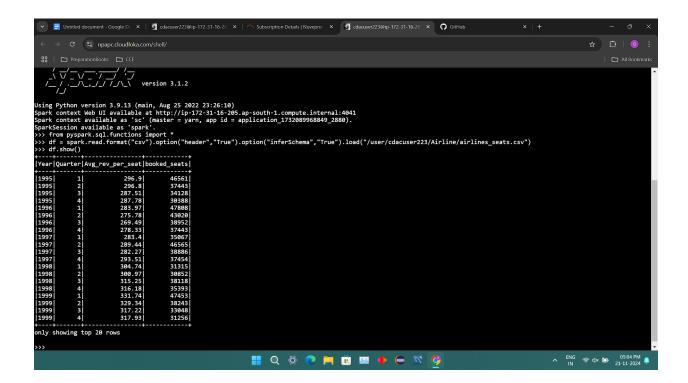
2) Query - select airline_id , count(airline_id) as count from routes where dest_airport_id is not NULL and src_airport_id is not Null group by airline_id order by count des c limit 3;



3) Query-select equipment, count (equipment) from routes group by equipment having equipment is not NULL limit 10;

```
Description of the state of the service of the ser
```

SPARK



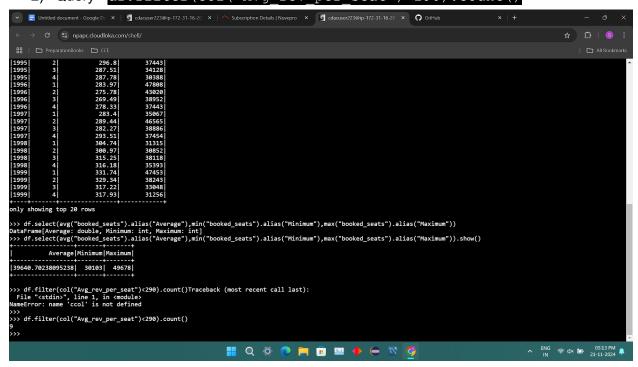
Question 2: using DataFrame

1) Query -

```
df.select(avg("booked_seats").alias("Average"),min("booked_seat
s").alias("Minimum"),max("booked_seats").alias("Maximum")).show
()
```

```
| Interest Concept | Conce
```

2) Query - df.filter(col("Avg_rev_per_seat") < 290).count()</pre>



3) Query -

df.groupBy("Quarter").agg(avg("Avg_rev_per_seat").alias("Avg_pe
r Quarter")).show(10)

4) Query -

df.groupBy("Year").agg(count("Year").alias("Year_count")).show(
)

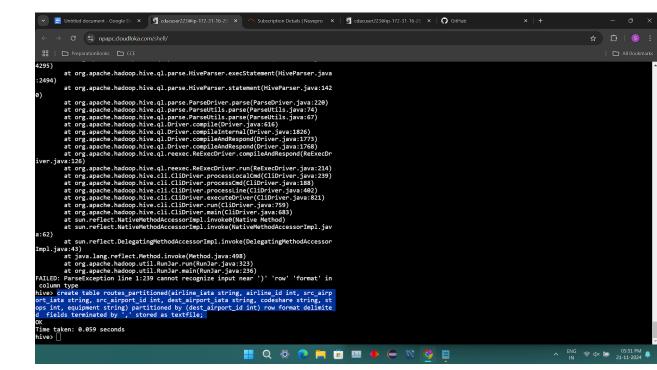
5) Query -

```
df.groupBy("Year").agg(sum(col("Avg_rev_per_seat")*col("booked_
seats")).alias("Total_revenue"))
.orderBy("Total_revenue",ascending=False).limit(1).show()
```

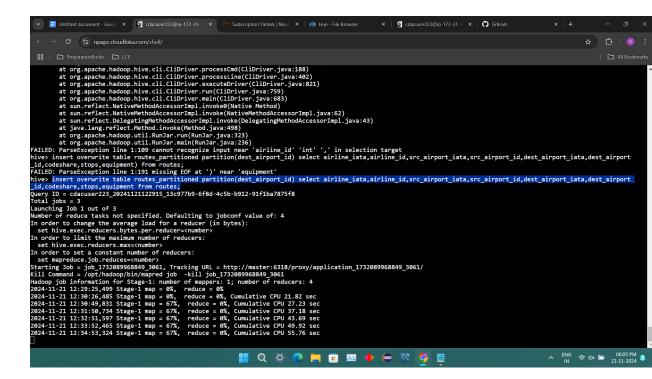
HIVE

Question 2:

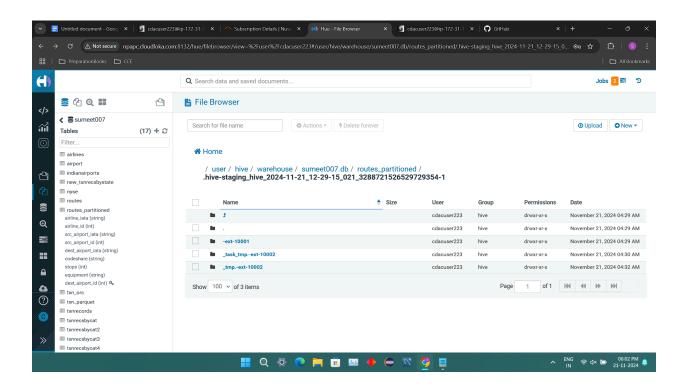
1) Query-create table routes_partitioned(airline_iata string,
 airline_id int, src_airp
 ort_iata string, src_airport_id int, dest_airport_iata
 string, codeshare string, st
 ops int, equipment string) partitioned by (dest_airport_id
 int) row format delimite
 d fields terminated by ',' stored as textfile;

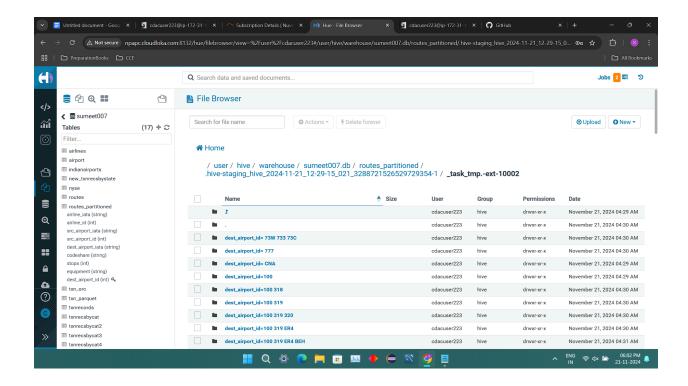


Query - insert overwrite table routes_partitioned partition(dest_airport_id) select airline_iata, airline_id, src_airport_iata, src_airport_id, dest_airport_iata, dest_airport id, codeshare, stops, equipment from routes;



Problem - Mapping and Reducing task was stuck as shown in the screenshot





3) Query - select * from from routes_partitioned where dest_airport_id = "ORD"