1) Which route is generating the most revenue per year


```
               autoDf.groupBy("origin","destination","year").sum("amount").show()
               ^

scala> autoDF.groupBy("origin","destination","year").sum("amount").show()
+------+-----------+----+-----------+
|origin|destination|year|sum(amount)|
+------+-----------+----+-----------+
|   PAK|        AUS|1993|        200|
|   AUS|        CHN|1990|        200|
|   AUS|        CHN|1993|        400|
|   RUS|        IND|1990|        200|
|   RUS|        IND|1992|        400|
|   IND|        AUS|1991|        400|
|   CHN|        AUS|1990|        200|
|   PAK|        RUS|1991|        200|
|   AUS|        IND|1992|        200|
|   PAK|        IND|1993|        200|
|   IND|        CHN|1991|        200|
|   IND|        CHN|1992|        200|
|   AUS|        PAK|1991|        200|
|   IND|        RUS|1991|        400|
|   CHN|        RUS|1990|        200|
|   CHN|        RUS|1992|        400|
|   CHN|        IND|1990|        400|
|   CHN|        IND|1993|        400|
|   RUS|        AUS|1990|        200|
|   RUS|        CHN|1992|        200|
+------+-----------+----+-----------+
only showing top 20 rows


scala>
```

2) What is the total amount spent by every user on air-travel per year


```
only showing top 20 rows

scala> autoDF.groupBy("user_id","year").sum("amount").show()
+-------+----+-----------+
|user_id|year|sum(amount)|
+-------+----+-----------+
|     10|1990|        200|
|     10|1992|        200|
|     10|1993|        200|
|      5|1991|        200|
|      5|1992|        400|
|      5|1994|        200|
|      6|1991|        400|
|      6|1993|        200|
|      1|1990|        200|
|      1|1993|        600|
|      7|1990|        600|
|      2|1991|        400|
|      2|1993|        200|
|      8|1990|        200|
|      8|1991|        200|
|      8|1992|        200|
|      3|1991|        200|
|      3|1992|        200|
|      3|1993|        200|
|      9|1991|        200|
+-------+----+-----------+
only showing top 20 rows

scala>
```

3) Considering age groups of < 20 , 20-35, 35 > ,Which age group is travelling the most
every year.

```
cloudera@quickstart:~                                                    _  □  ×

cloudera@quickstart:~   cloudera@quickstart:~/Dow...   cloudera@quickstart:~/Dow...   cloudera@quickstart:~/Dow...   cloudera@quickstart:~/Dow...

|    false|    false|1992|             340|
|    false|    false|1993|             170|
|    false|    false|1994|             170|
|     true|    false|1990|             170|
|     true|    false|1991|             510|
|     true|    false|1992|             170|
|     true|    false|1993|             850|
+---------+---------+----+----------------+


scala> autoDF.join(UserDF,autoDF("user_id") === UserDF("user_id")).join(TransDF,autoDF("transport") === TransDF("Transport")).groupBy(UserDF("a
ge")<20,UserDF("age")>20 && UserDF("age")<35,UserDF("age")>35,autoDF("year")).sum("distance").show()
+----------+-------------------------+----------+----+--------------+
|(age < 20)|((age > 20) && (age < 35))|(age > 35)|year|sum(distance)|
+----------+-------------------------+----------+----+--------------+
|     false|                     true|     false|1990|           850|
|     false|                     true|     false|1991|           680|
|     false|                     true|     false|1992|           340|
|     false|                     true|     false|1993|           170|
|     false|                     true|     false|1994|           170|
|      true|                    false|     false|1990|           170|
|      true|                    false|     false|1991|           510|
|      true|                    false|     false|1992|           170|
|      true|                    false|     false|1993|           850|
|     false|                    false|      true|1990|           340|
|     false|                    false|      true|1991|           340|
|     false|                    false|      true|1992|           680|
|     false|                    false|      true|1993|           170|
+----------+-------------------------+----------+----+--------------+


scala>
```