UK Train Rides Analysis Using Python

Business Insights

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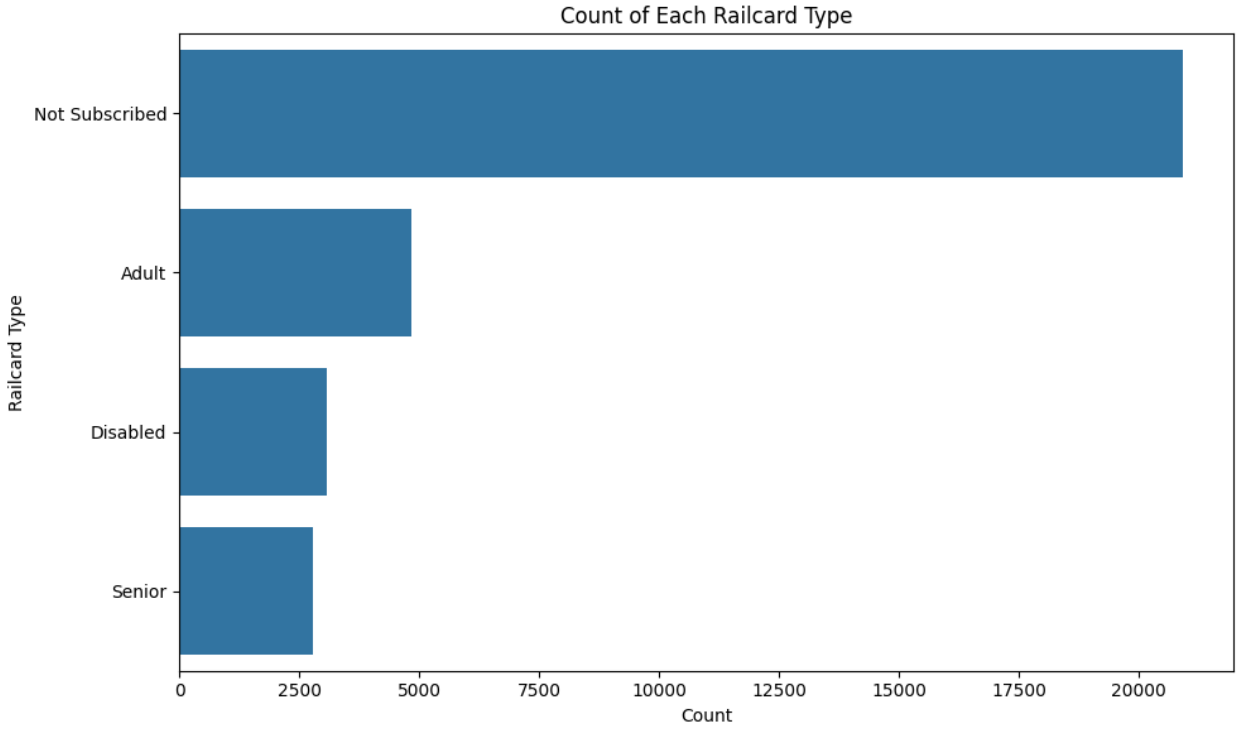
After Data Cleaning and processing, we started asking analysis questions in order to execute business insights.

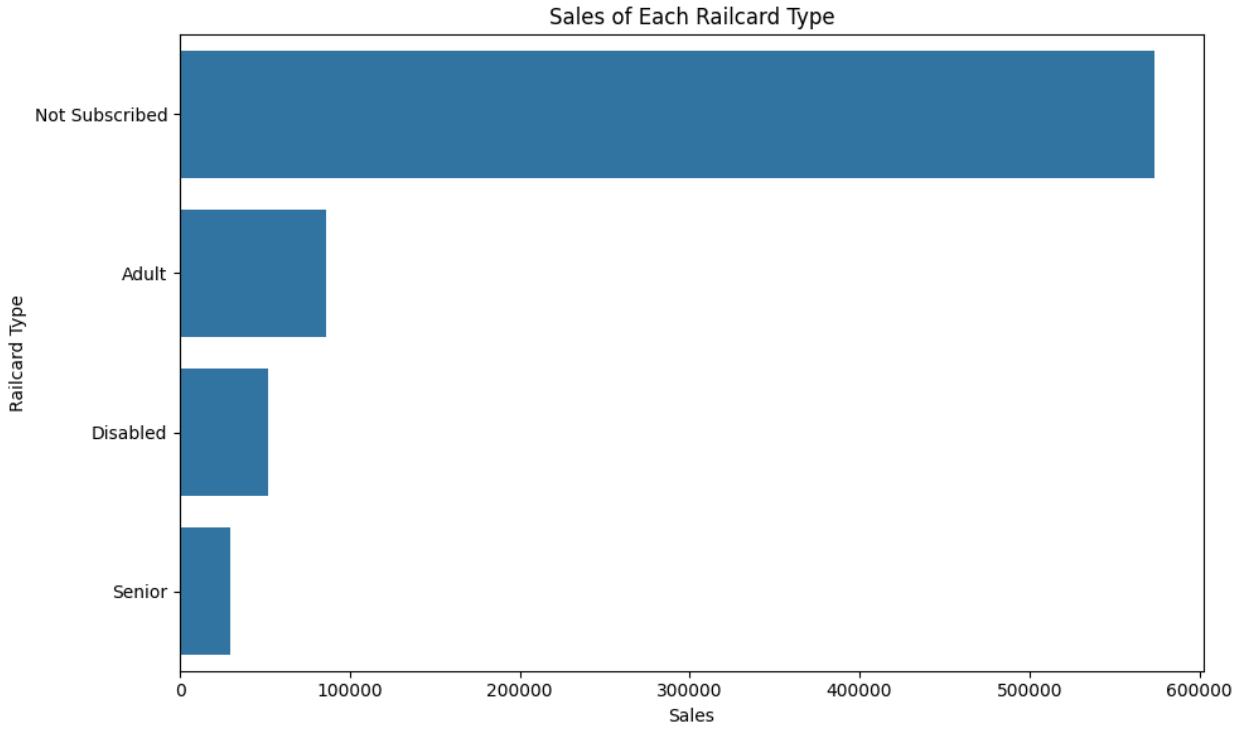
The Insights almost cover the aspects that stakeholders consider as decision making parameters.

The insights focus on:

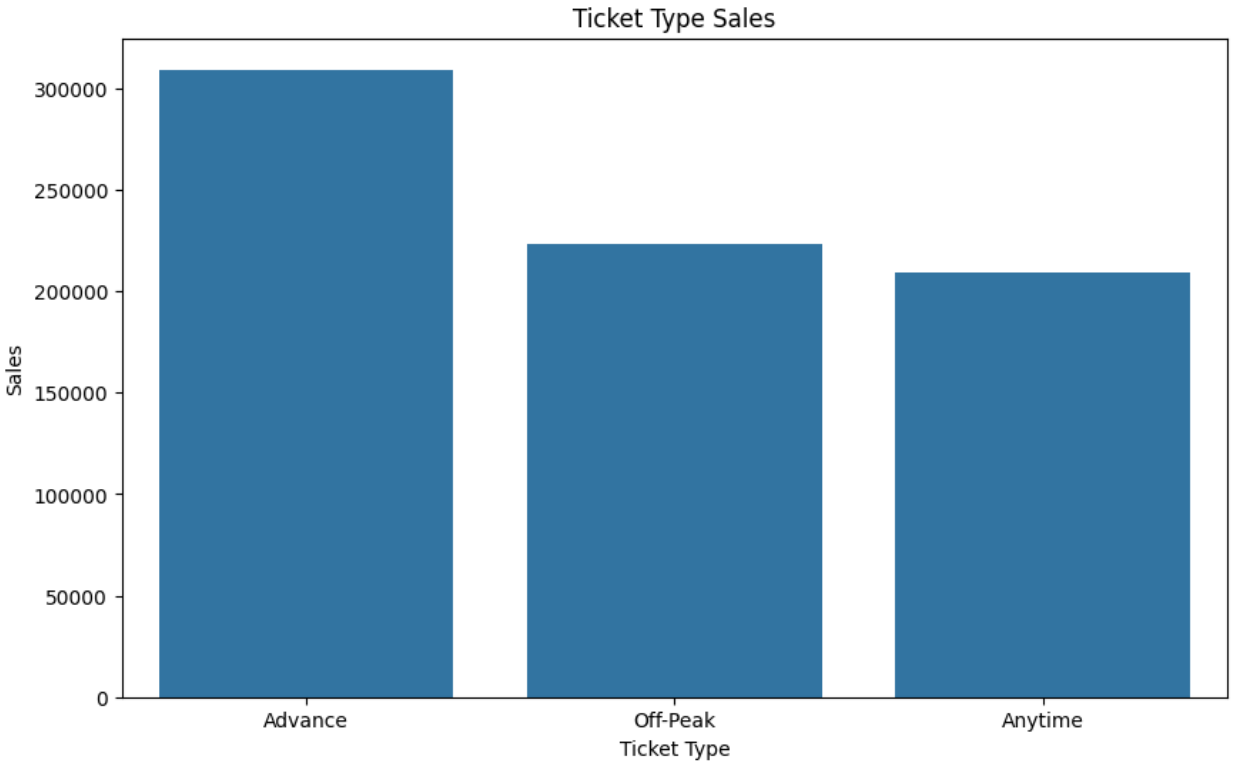
- Sales of tickets with different types and classes,
- payment method and purchase type,
- the overall tickets pattern, the rush hours,
- the most 10 crowded arrival and departure stations,
- the most 10 used routes,
- and the most reason for delay.

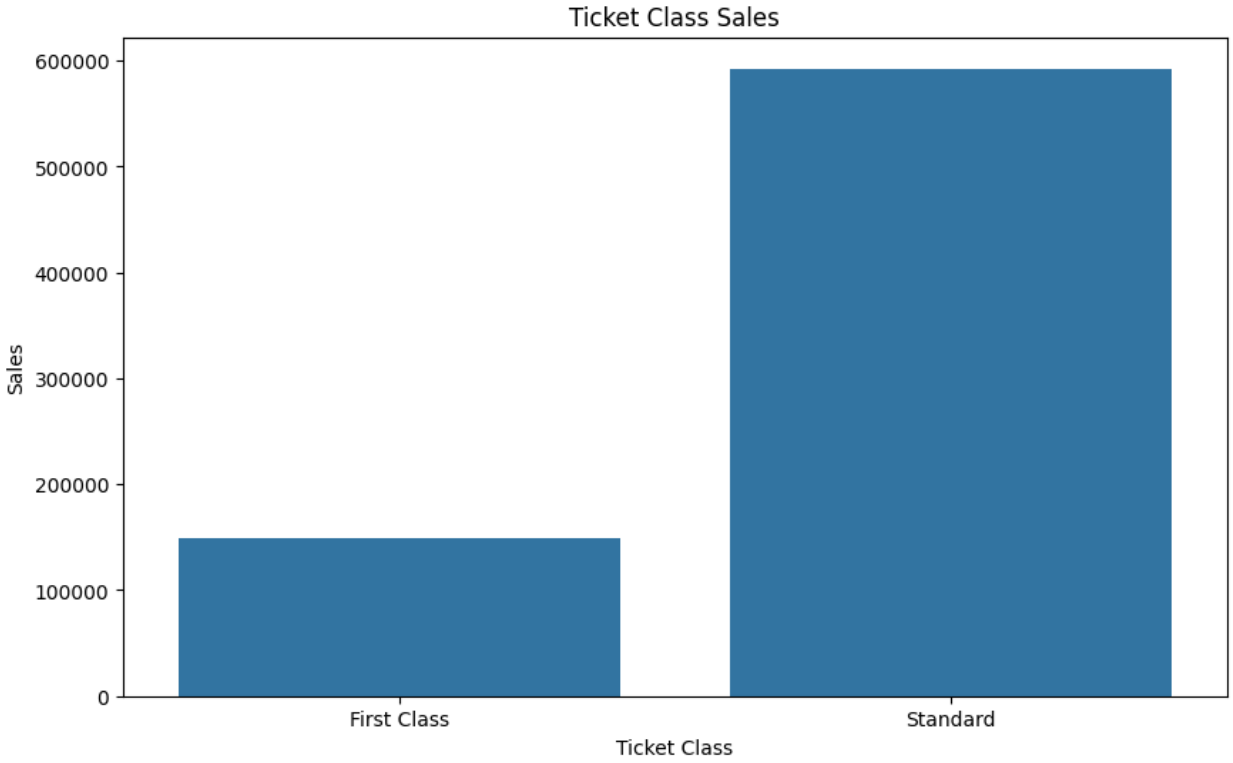
1- For railcard type, we can deduce that ‘not subscribed’ is the most happen state with over 4 times the second most value.





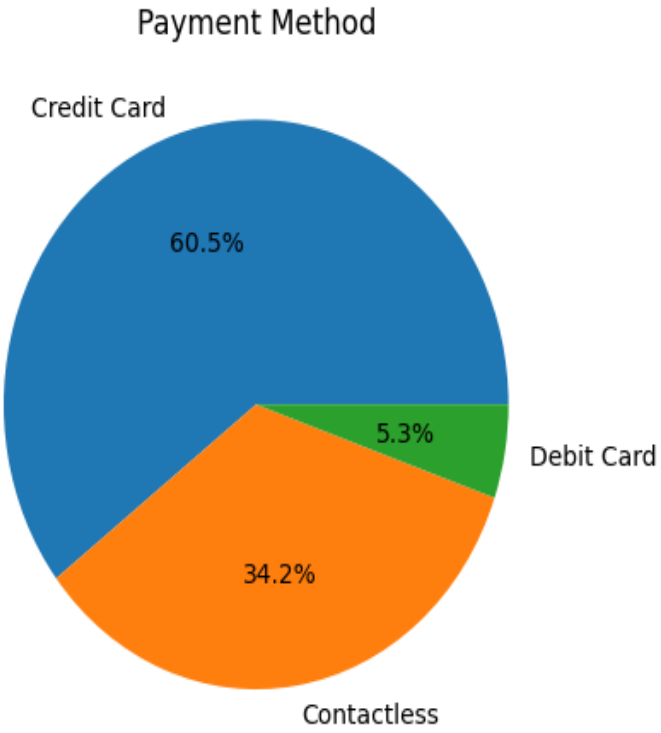
2- We see that Advance tickets are the type with the highest sales. We **recommend** to add features to other types, specifically anytime ticket.



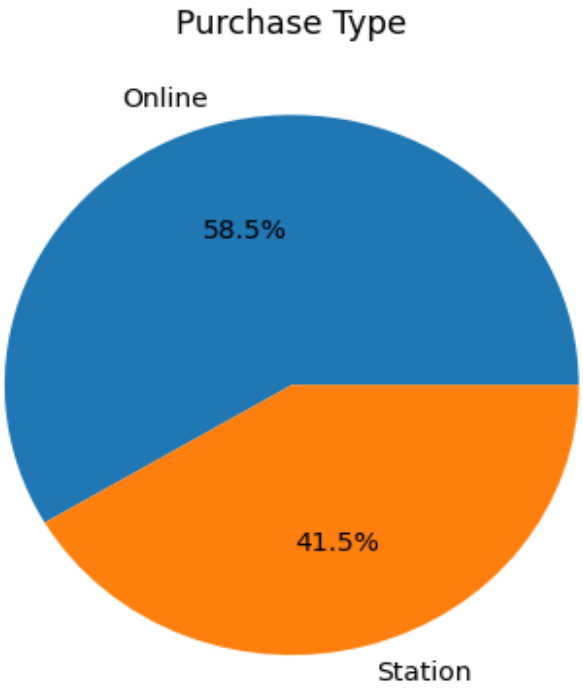


3- Standard class has higher sales than first class, which makes logic, but need more marketing for first class.

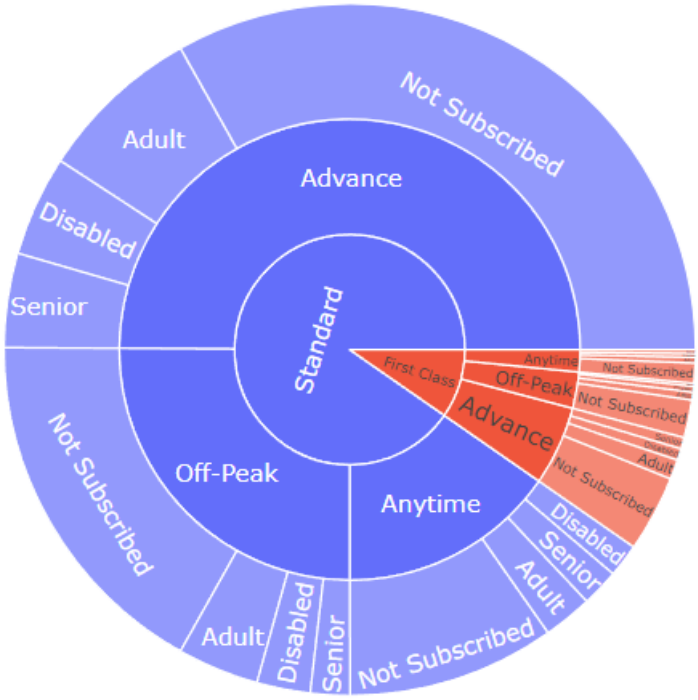
4- The most used payment method is credit card. We recommend adding deals and offers for credit card users which makes 60% of the transactions.



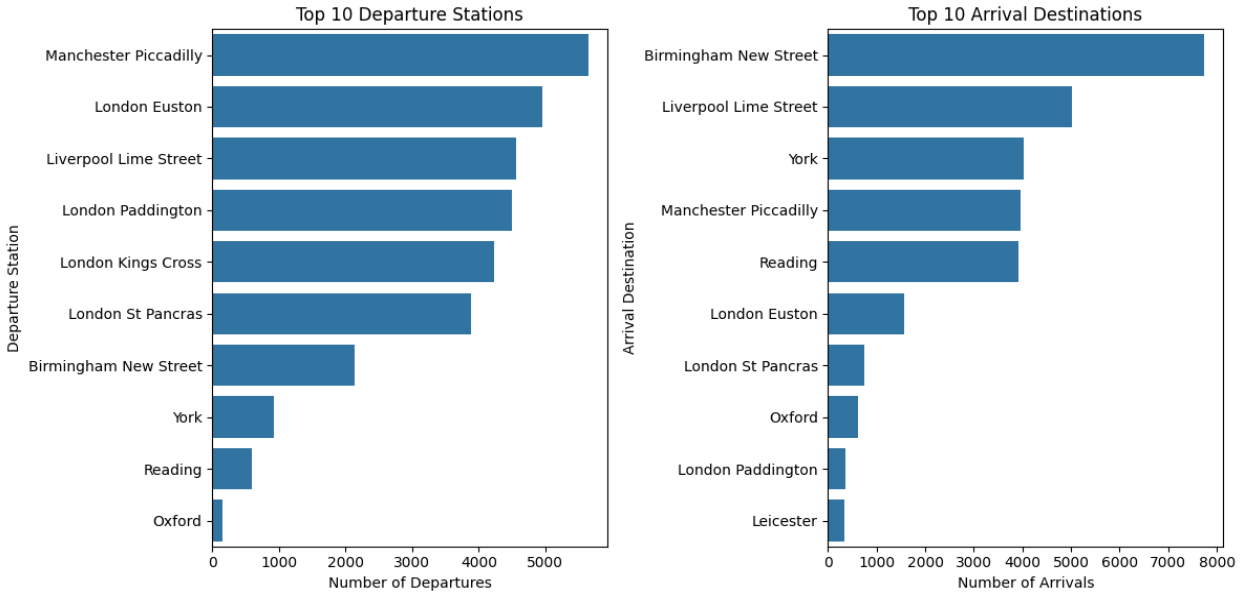
5- The online purchase type contributes to 58.5% of the transactions. So, more attention should be paid to online users

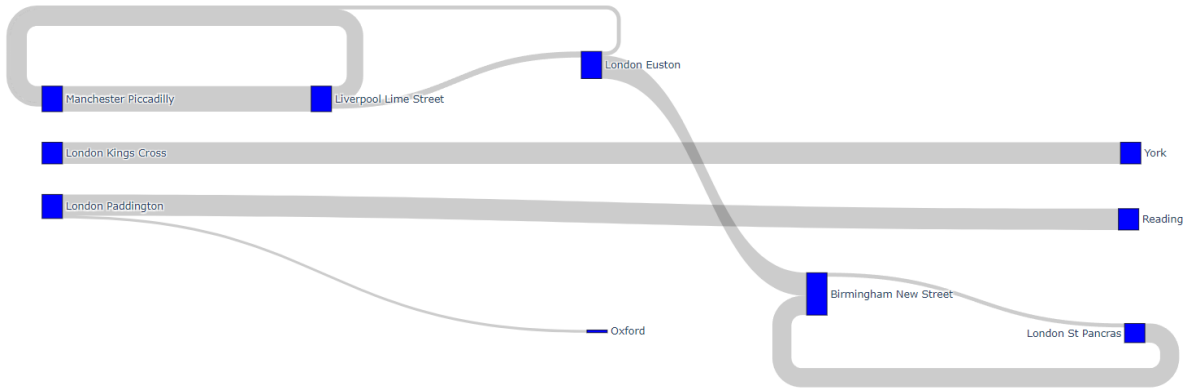


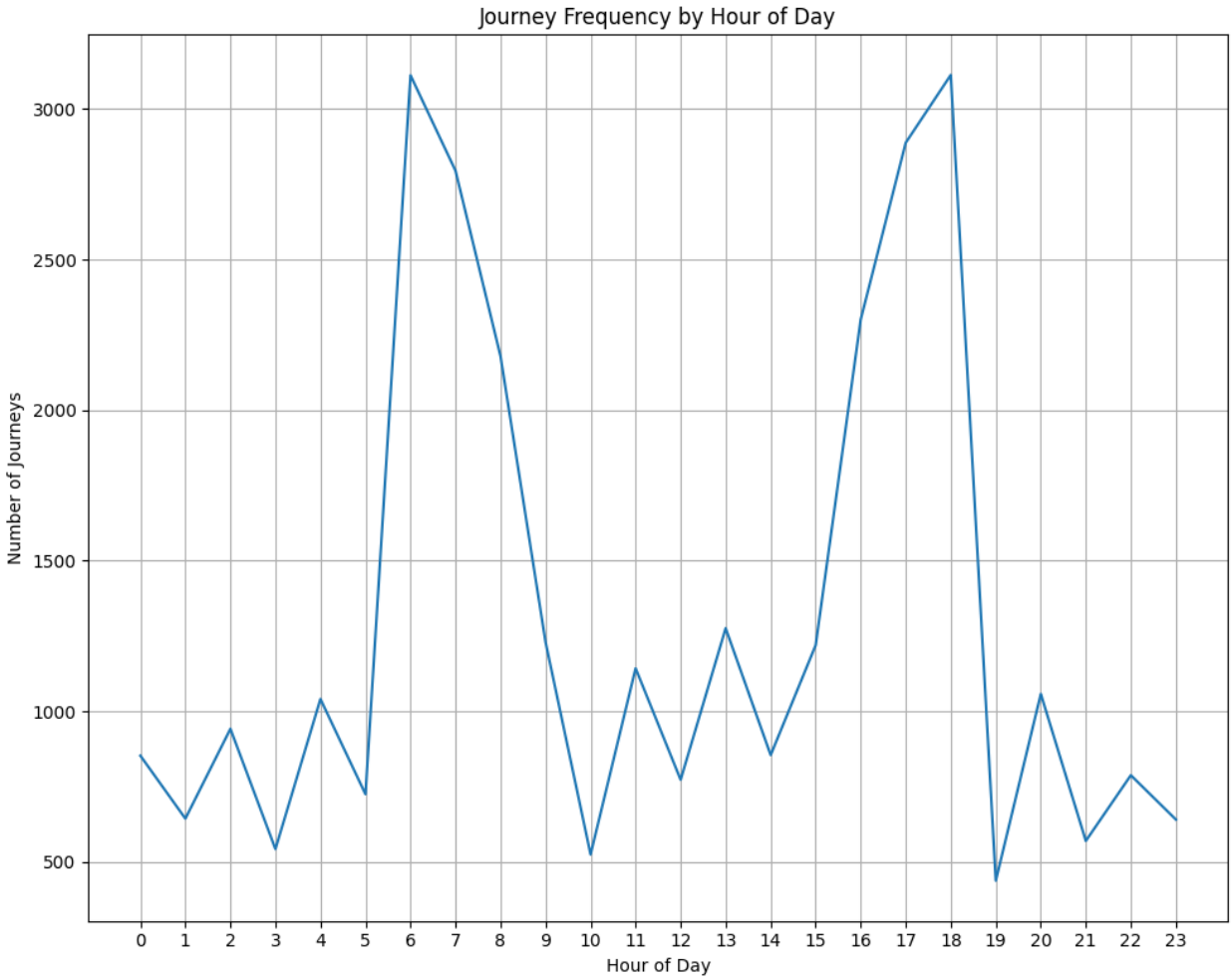
6- Tickets pattern shows how the standard, followed by advance and then not subscribed layers are the dominant pattern in ticket.



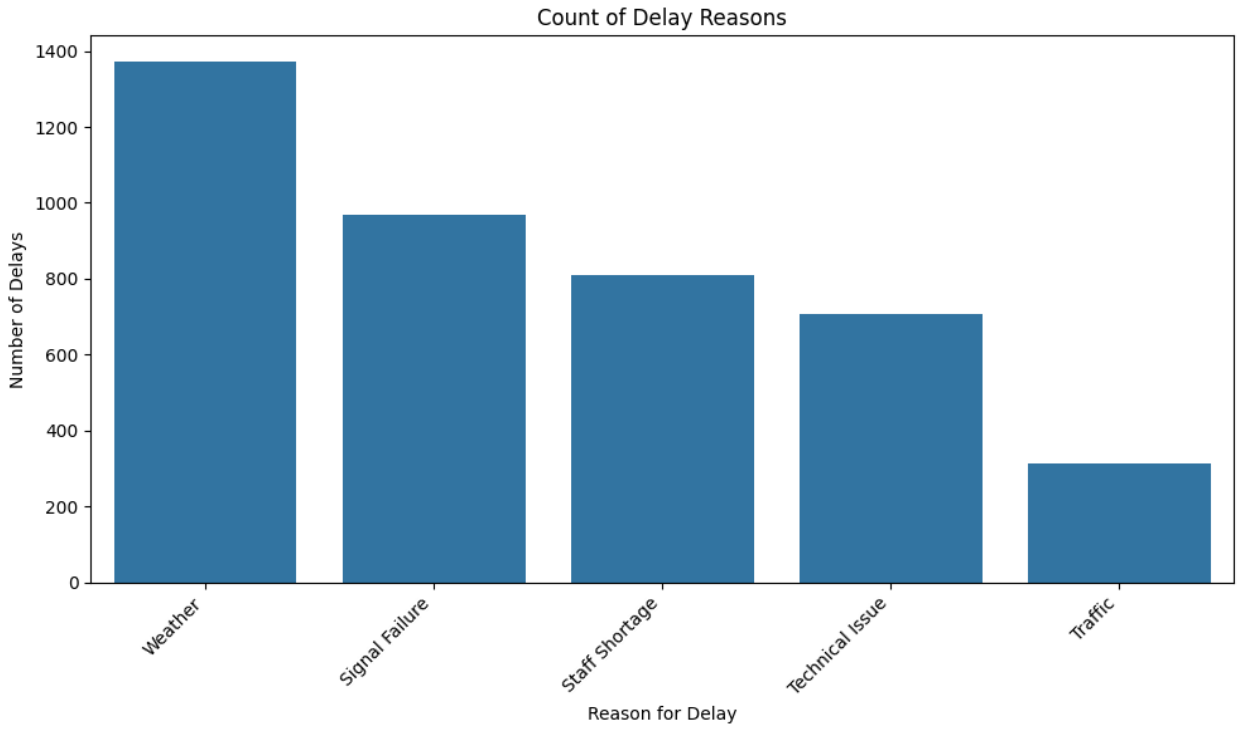
7- The top 10 departure stations and arrival destinations and then followed by the most 10 routes used show us the stations and routes we should count of as the most important and prior in maintenance.







8- The 6 and 18 O'clock are the most rushed hours of the day, and that should be accounted for stations preparations.



9- Having weather as the most reason for delay gives rise to weather forecasting importance