**Potential Questions from audience:**

1. Can you factor in weather conditions and holidays also while drawing the trend line on the number of trips? They would also have impact on the bike trips.

**Answer**: Yes, I imported date dimension data and joined with outgoing bike date field to understand the impact on outgoing bikes due to weekend and holidays.

1. Can this model be used for other bike sharing networks in other cities?

**Answer:** Yes, it can be used for other bike sharing networks. I did a quite a bit of data clean up, so we would have pay special attention to the attributes needed for other bike sharing networks.

1. Who is using the bike sharing most? Is it casual users or members?

**Answer:** Monthly membership pass holders are using the bike sharing the most. I did draw the plot, you can refer to that in the project document.

1. When are bike sharing trips occurring the most? What season or what month of the year?

**Answer:** I see the bike trips are occurring most during Feb-March season. Interestingly, Bike sharing demand has dropped during winter holidays.

1. How are the trips split across the stations in the city? Are they evenly spread out or concentrated around one station the most?

**Answer:** Station ID 3000(Virtual station) has most outgoing bikes. Since its virtual station, I’m assuming it is through the app.

1. Do we have the information on fare and payment data? Can you calculate average price per trip?

**Answer:** Fare or Payment data information is not available in the dataset. The trips are a mixture of different membership types and walk-ins.

1. What can you do to improve the predictive model for outgoing bikes further?

**Answer**: I tried Decision tree and random forest models. We can also use ensemble models and neural networks to improve the accuracy further.

1. Any other predictive analytics usecases can be done on bike sharing network dataset?

**Answer:** We can also implement the following usecases on bike sharing network dataset

Binary Classification problem : Research if given the passenger information, predict weather a certain passenger belongs to a monthly pass holder or a not a pass holder type.

Clustering problem: Cluster the stations based on the total number of trips per station

1. What is the customer retention rate? Do bike sharing have repeat users?

**Answer:**

I wish to do that analysis but user id are not present in the dataset. This analysis can be carried out using aggregation in pandas if user id is given.