**Instructions**

* Candidate can choose to prepare the solution for a minimum of two or all the below questions using Azure Free Credits.
* Candidate should attempt the below questions in between 1-4 hours. Any output generated in form of files for questions 2-5 can be attached in the result.
* A written solution with screenshots of how the candidate achieved the result achieved in Question 1.
* The candidate can choose how to present the solution whether it’s a document or a ppt during the interview.
* Candidate can refer to the data dictionary for the same.
* Candidate has to download the Jan till Nov 2023 Parquet files of NYC taxi data in the repository for the analysis. <https://github.com/bghos/evalfiles>

**Questions**

1. Load the NYC Trip data into a table using different techniques. Compare which technique is the best. The table can be built anywhere on the Synapse workspace.
2. Calculate the average trip distance and total trip distance by the day, and by the month. Prepare export file for this data.
3. Calculate the total amount paid by the payment type.
4. Build a small datawarehouse with dimensions and facts using the above data. You can even choose one dimension and one fact.
5. Display a MTD and YTD numbers on a visual in Power BI.