

**Question 1 :** Assume that you are a data engineer for company ABC. The company wanted to do cloud migration from their on-premises to Microsoft Azure cloud. You probably will use the Azure data factory for this purpose. You have created a pipeline that copies data of one table from on-premises to Azure cloud. What are the necessary steps you need to take to ensure this pipeline will get executed successfully?

**Question 2:** Assume that you are working for a company ABC as a data engineer. You have successfully created a pipeline needed for migration. This is working fine in your development environment. How would you deploy this pipeline in production without making any or very minimal changes?

**Question 3:** Assume that you have around 1 TB of data stored in Azure blob storage. This data is in multiple csv files. You are asked to do couple of transformations on this data as per business logic and needs, before moving this data into the staging container. How would you plan and architect the solution for this given scenario. Explain with the details.

**Question 4:** Assume that you have an IoT device enabled on your vehicle. This device from the vehicle sends the data every hour and this is getting stored in a blob storage location in Microsoft Azure. You have to move this data from this storage location into the SQL database. How would you design the solution explain with reason.

**Question 5:** Assume that you are doing some R&D over the data about the COVID across the world. This data is available by some of the public forum which is exposed as REST api. How would you plan the solution in this scenario?