**Tableau Introduction-Assignment 2**

1. With the help of the databases of your choice, illustrate the data connection process with a SQL and a NOSQL database server in Tableau. Also, compare and contrast the pros and cons of using a SQL database server and a NOSQL database server.
2. Connect with SQL database server of your choice, establish a connection with a dummy database “Employee” containing employee information (employee name, employee id, employee salary, employee department, employee years of experience) in a company. Write an SQL statement using tableau’s custom SQL feature to retrieve the employee id and employee salary in your tableau dashboard.
3. Imagine you are tasked with maintaining year-wise data of new students that join a certain college. Create three separate excel tables containing data of students for three consecutive years, one for each year and store it in a common database. Using the features available in the data source page of Tableau, join these tables with the same headers and create a single table.
4. Using the “PowerStore\_USA'' dataset, filter and display those products which satisfy the condition wherein the number of quantity ordered is more than the total average quantity ordered.
5. With respect to the “PowerStore\_USA'' dataset, apply a filter to your data such that only those values where the “Product-Category” starts with the letter “O” get displayed.

[*PFA links for the datasets used.*](https://drive.google.com/drive/folders/123UyMRbrReCjyn1K4g_FhsjKx6cP4zLH?usp=sharing)

**Ans 1)**

**Connecting Tableau to a SQL Database:**

1. Opening Tableau thenStart by launching Tableau on your computer.
2. Connect to DataIn Tableau, click on "Connect to Data" or go to "File" > "New Data Source."
3. Choose the SQL database I’m having PostgreSQL
4. Enter the connection details for your SQL database, including the server address, database name, username, and password.
5. Once connected configure the data source by selecting tables, writing custom SQL queries, or using stored procedures.
6. Now, you can start building your data visualization using the data from your SQL database.

**Connecting Tableau to a NoSQL Database:**

1. IExtracted, transformed, and loaded NoSQL data into a SQL database.
2. And thenFollowing the same steps as connecting to a SQL database in Tableau.
3. And then Building your visualizations using the data in the SQL database.

**Ans 2)**

Connected the tableau to the SQL server and extracted the columns employee\_id and employee\_salary columns in the tableau by clicking on “New Custom SQL” in the Data Source

SQL Query

SELECT employee\_id, employee\_salary

FROM Employee;

Ans 3) Github Link of the datas connected is provided below

<https://github.com/SantoshZaware/FSDSAssignments/blob/main/Sheet1%20(students_Year_3)_Sheet1.csv>

Ans 4)

<https://github.com/SantoshZaware/FSDS-Assignments/blob/main/Prooduct%20names%20having%20quatity%20more%20than%20Total%20average%20qualtity.twbx>

Ans 5)

<https://github.com/SantoshZaware/FSDS-Assignments/blob/main/Prooduct%20names%20having%20quatity%20more%20than%20Total%20average%20qualtity.twbx>