**Practical Assignment: Data Engineering Task**

Objective:

The objective of this assignment is to create a data engineering pipeline in Python and MySQL that involves ingesting data from a CSV file, preprocessing the data, storing it into a database, and creating a pipeline for this process.

Assignment Description:

You are provided with a CSV file containing sample [data](https://drive.google.com/file/d/1Yi1F25QpJfFh2TJuJdjemzRXriqO8Py8/view?usp=sharing). Your task is to create a Jupyter Notebook that performs the following steps:

* Ingest the data from the CSV file.
* Preprocess the data (cleaning, transformation, etc.).
* Store the preprocessed data into a MySQL database.
* Create a data engineering pipeline to automate the above steps.

Data Description:

* The CSV file contains sample data with multiple columns. It is the same data used in the class.

Submission Guidelines:

* Create a Jupyter Notebook containing Python code for the data engineering pipeline.
* Include comments and explanations throughout the notebook to explain the code and the steps performed.
* Save the CSV file and any other relevant files in the same directory as the notebook.
* Ensure that the notebook is well-structured and easy to follow.
* Test the code to ensure that it executes correctly without errors.
* Submit the following files:
  + Jupyter Notebook (.ipynb file)
  + CSV file containing sample data
  + Any additional files or resources used in the assignment

Note:

* You are free to use any data engineering tools and libraries available in Python (e.g., pandas, SQLAlchemy, etc.).
* Ensure that your code follows best practices and is well-documented.
* Plagiarism will not be tolerated, and any instances of plagiarism will result in penalties.

Assignment Deadline:

* 15th March 2024

Good luck! If you have any questions or need clarification, feel free to reach out.