**Performing ETL Using NiFi**

**Part 1: Writing Data to an Excel File**

Two folders, input and output, are created within the /opt/nifi/nifi-current folder in the NiFi container's bash window.

A computer screen shot of a blue screen

Description automatically generated

The movies.xlsx file is copied from the local machine to the input folder inside the NiFi Docker container using the Docker copy command.

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Description automatically generated

The NiFi UI is opened in the browser, and a new process group named Assignment17 is created.

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Description automatically generated

A GetFile processor is added to the NiFi canvas and configured with a 15 seconds run schedule, the appropriate Input Directory, and File Filter.

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Description automatically generated

A ConvertExcelToCSVProcessor is added and configured with a 15 seconds run schedule and the Sheets to Extract field set to Sheet 1 - movies.

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Description automatically generated

A PutFile processor is added and configured, with success selected to Automatically Terminate Relationships, a 15 seconds run schedule, and the Directory field set.

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The GetFile processor is connected to the ConvertExcelToCSVProcessor, and the latter is connected to the PutFile processor with the appropriate relationships.

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The GetFile, ConvertExcelToCSVProcessor, and PutFile processors are started.

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The /opt/nifi/nifi-current/output folder in the NiFi CLI is navigated, and the created CSV file for processing is verified.

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**Part 2: Writing Data to an SQL Database**

A new database named movielens and a movies table with specific column fields are created in MySQL Workbench.

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The movies.csv file is placed on the NiFi server in a newly created directory by using Docker commands.

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NiFi is opened in the browser, and the MySQL controller service setup is displayed.

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A MySQL controller service named MySQL is created and enabled.

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Description automatically generated

Reader and writer processors are created and configured, and their enabling is confirmed.

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A data pipeline consisting of five processors, including GetFile, SplitText, ConvertRecord, ConvertJSONToSQL, and PutSQL, is set up.

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The processors are connected with appropriate relationships.

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Each processor, starting with the GetFile processor, is started, and the data propagation is observed.

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A query to select all data from the movies table is executed in MySQL Workbench, revealing the rows of data loaded into the table.

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