Data Science Infrastructures – Exercise 05

**Assignment I: View CSV Data in Neo4J**

After the using the Cypher Command for loading the CSV file for the specific columns, I also implemented the code snippet WHERE to prevent the errors. Also, the column with integer and float values were converted accordingly to their respective data type. The screen shot of the final output along with code is shown below.

A screenshot of a computer

Description automatically generated

Figure 1Loading the specific columns of 'orders.csv' in Neo4J

**Assignment II – Create the Graph**

The schema that represents customers, products, and orders as well as their relationships are shown below. Also, their necessary properties are adde to the nodes and relationships.

A diagram of a order

Description automatically generated

Figure 2 Schema that represents customer, products, and orders along with their relationships

**Assignment II: B**

1. Order nodes and properties according to the model using the MERGE command are created and shown below. Also, the result is checked by using the MATCH clause.

A screenshot of a computer

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Figure 3 Creating Order nodes and setting their properties

1. Now, the results after extending the Cypher to create the Product Nodes is shown below.

A screenshot of a computer program

Description automatically generated

Figure 4 Cypher extended to create Product nodes.

1. After connecting Order nodes with the Product nodes and adding the Quantity parameter, the Cypher parts look like this.

A screen shot of a computer program

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Figure 5 Final Cyper part after connecting Order nodes with Product nodes

The result containing the order, and their related products is shown here. We can see that there are 907 node labels (Order and Product) with 2,955 relationship types (CONTAINS). The Property keys also reflect all the properties that were considered.

A screenshot of a computer

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Figure 6 Final outlook of Cypher part