University of Minho
Department of Computer Science

Course: MSc in Computer Engineering / MSc in Bioinformatics
U.C.: NoSQL Databases

Exercise Sheet PL07	
Teacher:	António Abelha / Cristiana Neto
Theme:	Data Migration: Oracle to Neo4J
Class:	Laboratory Practice
Academic Year:	2023-2024 – 2nd Semester
Duration of the lesson:	2 hours

Exercise

The objective of this exercise is to develop a Python script to migrate data from an Oracle database to Neo4J. You must extract data from various Oracle tables and insert it into Neo4J.

Consider the tables from the Oracle database in sheet FE01:

AUTOR {ID_AUTOR, NOME}
EDITORA {ID_EDITORA, NOME}
GENERO {ID_GENERO, NOME}
SUPORTE {ID_SUPORTE, NOME}
TITULO {ID_TITULO, TITULO, PRECO, DTA_COMPRA, ID_EDITORA, ID_SUPORTE, ID_GENERO, ID_AUTOR}
MUSICA {ID_MUSICA, NOME, ID_AUTOR, ID_TITULO}
REVIEW {ID_REVIEW, ID_TITULO, DTA_REVIEW, CONTEUDO}

You must develop a Python script that connects to Oracle, extracts data from these tables, and create the respective Neo4J nodes and relationships.

Technical requirements:
- Python 3.x
- Python packages: oracledb and neo4j

Submit the developed Python script along with any documentation required to understand and run the script.