

**TY B.Tech. (CSE) – II [ 2024-25 ]**

**6CS371 : Advanced Database System Lab.**

**Assignment No. 11**

**Neo4j Graph Database**

Consider the “**Research Papers Database**” scenario as follows :

The research papers have authors (often more than one). Most papers have a classification (what the paper is about). The classifications form a hierarchy in several levels (for example, the classification “Databases” has the sub-classifications “Relational” and “Object-Oriented”). A paper usually has a list of references, which are other papers. These are called citations.

1. Design/model the graph database using Neo4j for above scenario.
2. Download the raw data from **Cora Research Paper Classification Project** : <http://people.cs.umass.edu/~mccallum/data.html> The database contains approximately 25,000 authors, 37,000 papers and 220,000 relationships.
3. Load this data using Neo4j Data Browser
4. Design the **Angular form** for any kind of search on above database. The form should able to answer queries like
  - a) Does paper A cite paper B? If not directly, does paper A cite a paper which in its turn cites paper B? And so on, in several levels.
  - b) Show the full classification of a paper (for example, Databases / Relational)
  - c) Any miscellaneous / user defined queries.

**Note : Follow the submission guidelines.**

**Deadline : 14/04/2025**

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