

Practice Number 3

RDFS-Exercise 1.

Give a graphical presentation and RDF Schema that describe the following:
Professors and assistants are subclasses of teachers. Each teacher has a name. Each course has a course_id. Professors lecture courses while assistants supervise courses.

Exercise 2. RQL-Exercise .

By using RQL and the RDF Schema of the previous exercise give the following queries:

- a) Retrieve all the instances of the class Teacher
- b) Retrieve all the instances of the class Teacher that are either professors or assistants.
- c) Retrieve the names of the assistants.

Exercise 3.

Discuss the difference between the following statements, and draw graphs to illustrate the difference: X supports the proposal; Y supports the proposal; Z supports the proposal. The group of X, Y, and Z supports the proposal.

Draw graphs to illustrate the difference.

Exercise 4. Compare `rdfs:subClassOf` with type extension in XML Schema

Exercise 5. Try to map the relational database model on RDF.

Exercise 6. Compare entity-relationship modelling to RDF.

Exercise 7. Model part of a library in RDF Schema: books, authors, publishers, years, copies, dates, and so on. Then write some statements in RDF, and query them using RQL.