Due on: Thursday 07.06.2005 by 14:00 (in class)

## Exercise 1

Given the following sentence:

- a) "Messe Freiburg is located at Hermann-Mitsch-Str. 3, 79108, Freiburg, Germany."
  - 1. Write down the sentence in RDF N3 notation *without* blank nodes, using *at least 3* triples.
- b)
- 1. Write down the sentence in RDF N3 notation *with at least one* blank nodes, using *at least 3* triples.
- 2. Draw a Graph representation of 1b-1. Please indicate the resources, literals and properties.
- c) A media store offers the following products:

```
<?xml version="1.1"?>
cproducts xmlns:xsi="'http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="products.xsd">
<book>
      <title>Learning XML</title>
      <author>EricRay</author>
      <price>30.00</price>
</book>
<cd>
      <title>for you</title>
      <interpret>Frank Chastenier</interpret>
      <price>15.00</price>
</cd>
<dvd>
      <title>Goldrush</title>
      <director>Charly Chaplin
      <price>19.00</price>
</dvd>
</products>
```

Represent the contents of the product table in RDF/RDFS. Specify an RDF schema that tries to describe your vocabulary as precise as possible

## Exercise 2

a) Use RDF/XML notation to create a RDFS ontology about:

Vehicle, Truck, Van, Family Vehicle and SUV.

Note that in our case, we consider SUV belongs to both a Van and Family Vehicle. A vehicle belongs to *Person. Number of doors* of a family vehicle should be stated.

b) Write an instance of a Family Vehicle using RDF/XML notation. E.g. an instance of Karen's family vehicle with 5 doors.