

Due on: **Wednesday 20.06.2007 by 13:00** (via email: tso@ismll.uni-hildesheim.de)

Exercise 9.1

Given the following sentence:

- a) "Uni Hildesheim is located at Marienburger Platz 22, 31141, Hildesheim, Germany."
1. [2 points] Write down the sentence in RDF N3 notation *without* blank nodes, using *at least* 3 triples.
- b)
1. [2 points] Write down the sentence in RDF N3 notation *with at least one* blank nodes, using *at least* 3 triples.
 2. [2 point] Draw a Graph representation of 9.b-1. Please indicate the resources, literals and properties.
- c) A media store offers the following products:

```
<?xml version="1.1"?>
<products 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</director>
    <price>19.00</price>
  </dvd>
</products>
```

[5 points] 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 9.2

a) [7 points] 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) [2 points] Write an instance of a Family Vehicle using RDF/XML notation. E.g. an instance of Karen's family vehicle with 5 doors.