

**TD 03 – RDF-RDFS-Correction**

**Solution :**

➤ **Représentation en Triplets :**

Représentation en Triplets	
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-rdf#Pierre&gt;   &lt;http://www.univ-eloued.dz/ows/td1-ns#Age&gt;     "30"^^http://www.w3.org/2001/XMLSchema#int</pre>
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-rdf#Pierre&gt;   &lt;http://www.univ-eloued.dz/ows/td1-ns#Connait&gt;     &lt;http://www.univ-eloued.dz/ows/td1-rdf#Marie&gt;</pre>
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-rdf#Pierre&gt;   &lt;http://www.w3.org/1999/02/22-rdf-syntax-ns#type&gt;     &lt;http://www.univ-eloued.dz/ows/td1-ns#Etudiant&gt;</pre>
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-rdf#Marie&gt;   &lt;http://www.w3.org/1999/02/22-rdf-syntax-ns#type&gt;     &lt;http://www.univ-eloued.dz/ows/td1-ns#Etudiant&gt;</pre>
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-ns#Etudiant&gt;   &lt;http://www.univ-eloued.dz/ows/td1-ns#Sous&gt;     &lt;http://www.univ-eloued.dz/ows/td1-ns#Adulte&gt;</pre>
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-rdf#Pierre&gt;   &lt;http://www.w3.org/1999/02/22-rdf-syntax-ns#type&gt;     &lt;http://www.univ-eloued.dz/ows/td1-ns#Adulte&gt;</pre>
•	<pre>&lt;http://www.univ-eloued.dz/ows/td1-rdf#Marie&gt;   &lt;http://www.w3.org/1999/02/22-rdf-syntax-ns#type&gt;     &lt;http://www.univ-eloued.dz/ows/td1-ns#Adulte&gt;</pre>

➤ Graphe rdf :



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## Notation RDF

```

<?xml version="1.0"?>
<rdf:RDF
  xmlns:rdf = "http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:local = "http://www.univ-eloued.dz/ows/td1-ns#" >

  <rdf:Description about="http://www.univ-eloued.dz/ows/td1-rdf#Pierre">
    <local:Age rdf:datatype="http://www.w3.org/2001/XMLSchema#int"> 30 </local:Age>
    <local:Connait resource="http://www.univ-eloued.dz/ows/td1-rdf#Marie" />
    <rdf:type resource="http://www.univ-eloued.dz/ows/td1-ns#Etudiant" />
    <rdf:type resource="http://www.univ-eloued.dz/ows/td1-ns#Adulte" />
  </rdf:Description>

  <rdf:Description about="http://www.univ-eloued.dz/ows/td1-rdf#Marie">
    <rdf:type resource="http://www.univ-eloued.dz/ows/td1-ns#Etudiant" />
    <rdf:type resource="http://www.univ-eloued.dz/ows/td1-ns#Adulte" />
  </rdf:Description>

  <rdf:Description about="http://www.univ-eloued.dz/ows/td1-rdf#Etudiant">
    <local:sous resource="http://www.univ-eloued.dz/ows/td1-ns#Adulte" />
  </rdf:Description>
</rdf:RDF>

```

## Notation RDF Schema

```

<?xml version="1.0"?>
<rdf:RDF
  xmlns:xs = http://www.w3.org/2001/XMLSchema#
  xmlns:rdf = "http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs = "http://www.w3.org/2000/01/rdf-schema#">

  <rdfs:Class rdf:ID="Adulte"> <rdfs:comment>La classe Adulte</rdfs:comment> </rdfs:Class>
  <rdfs:Class rdf:ID="Etudiant">
    <rdfs:comment>La classe des Etudiants</rdfs:comment>
    <rdfs:subClassOf rdf:resource="#Adulte"/>
  </rdfs:Class>

  <rdf:Property rdf:about="connait">
    <rdfs:domain rdf:resource="#Adulte"/>
    <rdfs:range rdf:resource="#Adulte"/>
  </rdf:Property>

  <rdf:Property rdf:about="age">
    <rdfs:domain rdf:resource="#Adulte"/>
    <rdfs:range rdf:resource="rdfs:Literal" />
  </rdf:Property>

  <!-- definition des instances -->

```

```
<Etudiant rdf:ID="Pierre">  
  <Age rdfs:datatype="xs:Integer">30</Age> <Connait> <Etudiant  
rdf:ID="Marie"/></Connait>  
</Etudiant>  
</rdf:RDF>
```