

Using the interactive exercise to query RDF

This exercise will let you enter RDF as either Turtle or NTriples. You can then run SPARQL queries on this input and receive the results.

When you load the form, the RDF statements (in Turtle) will be displayed automatically:

RDF syntax

```
@base <http://www.euclid-project.eu/examples/module1#> .
@prefix vocab: <http://www.euclid-project.eu/ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .

vocab:ResearchProject rdfs:subClassOf foaf:Group .
vocab:consortiumMember rdfs:subPropertyOf foaf:member .
<ham> a foaf:Person .
```

Vocabulary (RDF/XML) import URL:

To execute a SPARQL query, you need to use the lower half of the form:

```
1 PREFIX ex1: <http://www.euclid-project.eu/examples/module1#>
2 PREFIX vocab: <http://www.euclid-project.eu/ns#>
3 PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
4 PREFIX foaf: <http://xmlns.com/foaf/0.1/>
5
6 SELECT ?agent WHERE {?agent a foaf:Agent}
```

Q. In Question 1, how do I make the form expect NTriples rather than Turtle?

A. You need to change the RDF syntax. Using the selector at the top of the form, choose 'NTriples' instead.

Q. In Question 2, should I add the resource in Turtle or NTriples form?

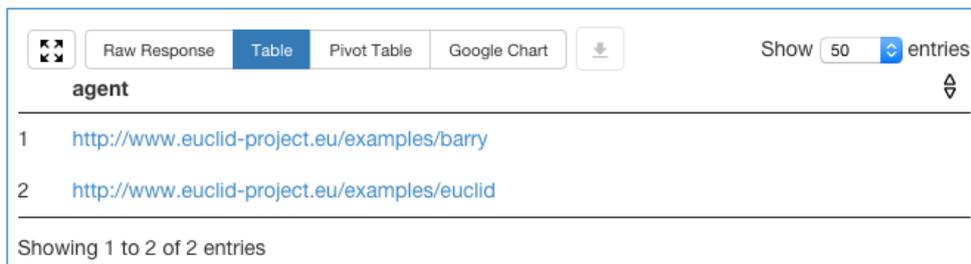
A. NTriples. Add it to the RDF input box, along with your NTriples from Question 1.

Q. My SPARQL query won't work, what have I done wrong?

A. You need to enter the query in based on the syntax covered in the course. Remember to add the prefixes as shown below:

```
1 PREFIX ex1: <http://www.euclid-project.eu/examples/module1#>
2 PREFIX vocab: <http://www.euclid-project.eu/ns#>
3 PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
4 PREFIX foaf: <http://xmlns.com/foaf/0.1/>
5
6 SELECT ?agent WHERE {?agent a foaf:Agent}
```

After you submit, you should see the following:



The screenshot shows a web interface for displaying SPARQL query results. At the top, there are tabs for 'Raw Response', 'Table', 'Pivot Table', and 'Google Chart', with 'Table' selected. To the right, there is a 'Show 50 entries' dropdown menu. Below the tabs, the column header is 'agent'. The table contains two rows of results:

	agent
1	http://www.euclid-project.eu/examples/barry
2	http://www.euclid-project.eu/examples/euclid

At the bottom of the table, it says 'Showing 1 to 2 of 2 entries'.

This shows that 'barry' and 'euclid' are both returned as 'agents'.

Q. In Question 4, how do I add the property to consortiumMember?

A. You might want to revisit the section on RDFS in Step 1.8 'Web Standards for the Semantic Web'. HINT: you might want to look at the examples for rdfs:domain and rdfs:range.

Q. I've completed the exercise, how do I know if I did it correctly?

A. Check out the model answers sheet available from the Step.