

APACHE JENA FUSEKI AND SPARQL

1. Sample Select query and its output in Table Response format

The screenshot shows the Apache Jena Fuseki web interface. The browser address bar displays `localhost:3030/dataset.html?tab=upload&ds=/election`. The query editor contains the following SPARQL query:

```
1
2
3 SELECT ?subject ?predicate ?object
4 WHERE {
5   ?subject ?predicate ?object.
6 }
7 LIMIT 25
```

Below the query editor, the "QUERY RESULTS" section shows the "Table" response format. It displays a table with 3 columns: `subject`, `predicate`, and `object`. The table contains 13 rows of results, showing URIs for subjects and predicates, and various named individuals for objects.

subject	predicate	object
<code><https://www.kdm.com/OWL/Election#fanatical></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>
<code><https://www.kdm.com/OWL/Election#fanatical></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><https://www.kdm.com/OWL/Election#clinton></code>
<code><https://www.kdm.com/OWL/Election#backstorymom></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>
<code><https://www.kdm.com/OWL/Election#backstorymom></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><https://www.kdm.com/OWL/Election#clinton></code>
<code><https://www.kdm.com/OWL/Election#cioy></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>
<code><https://www.kdm.com/OWL/Election#cioy></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><https://www.kdm.com/OWL/Election#clinton></code>
<code><https://www.kdm.com/OWL/Election#jeremiahwright></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>
<code><https://www.kdm.com/OWL/Election#jeremiahwright></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><https://www.kdm.com/OWL/Election#clinton></code>
<code><https://www.kdm.com/OWL/Election#bnjbyw></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>
<code><https://www.kdm.com/OWL/Election#bnjbyw></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><https://www.kdm.com/OWL/Election#clinton></code>
<code><https://www.kdm.com/OWL/Election#weak></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>
<code><https://www.kdm.com/OWL/Election#weak></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><https://www.kdm.com/OWL/Election#clinton></code>
<code><https://www.kdm.com/OWL/Election#ftzli></code>	<code><http://www.w3.org/1999/02/22-rdf-syntax-ns#type></code>	<code><http://www.w3.org/2002/07/owl#NamedIndividual></code>

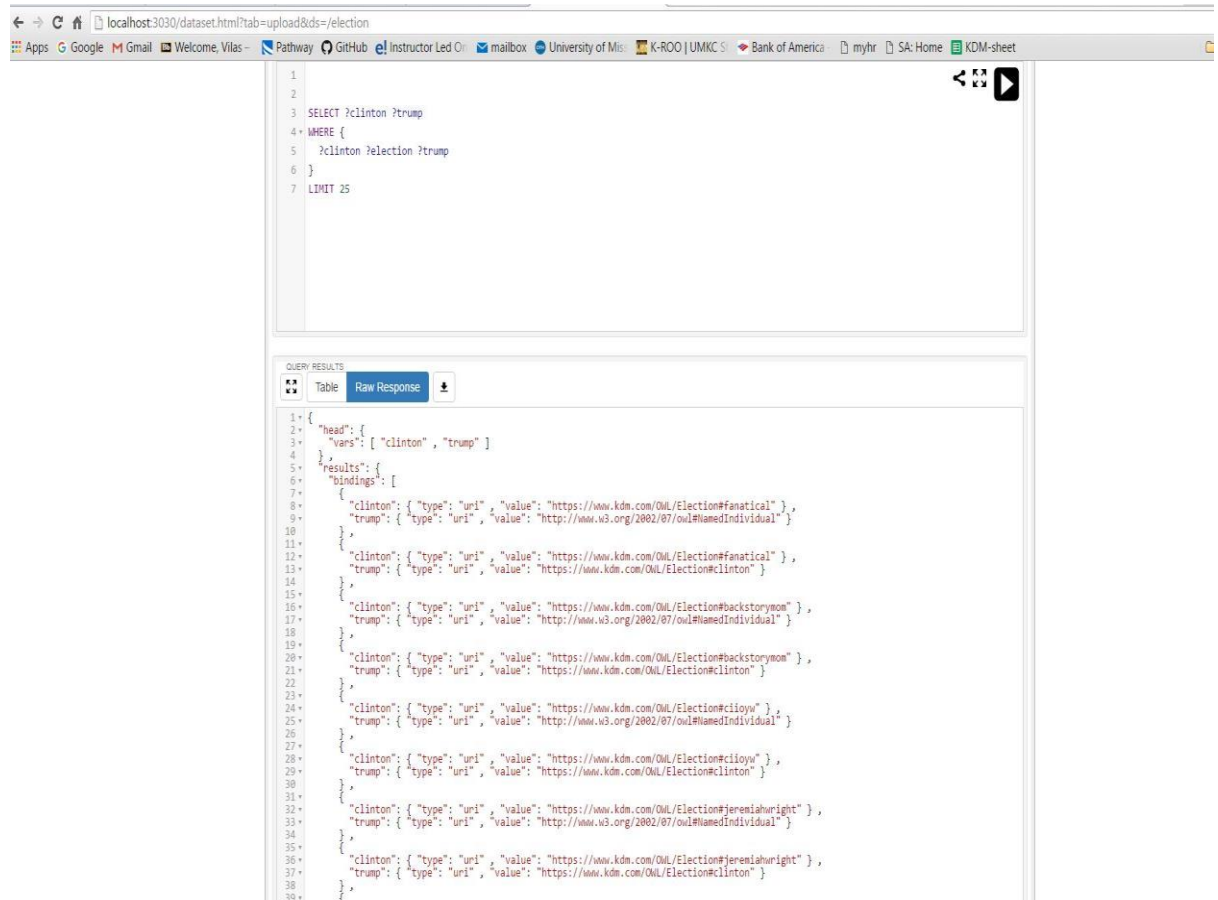
2. Sample select query and its output in Raw Response format

The screenshot shows the Apache Jena Fuseki web interface. The browser address bar displays `localhost:3030/dataset.html?tab=upload&ds=/election`. The query editor contains the same SPARQL query as in the first screenshot.

Below the query editor, the "QUERY RESULTS" section shows the "Raw Response" format. It displays a JSON response representing the query results. The response includes a `head` section with `vars` and a `results` section with `bindings` for each row of results.

```
1 {
2   "head": {
3     "vars": [ "subject", "predicate", "object" ]
4   },
5   "results": {
6     "bindings": [
7       {
8         "subject": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#fanatical" },
9         "predicate": { "type": "uri", "value": "http://www.w3.org/1999/02/22-rdf-syntax-ns#type" },
10        "object": { "type": "uri", "value": "http://www.w3.org/2002/07/owl#NamedIndividual" }
11      },
12      {
13        "subject": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#fanatical" },
14        "predicate": { "type": "uri", "value": "http://www.w3.org/1999/02/22-rdf-syntax-ns#type" },
15        "object": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clinton" }
16      },
17      {
18        "subject": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#backstorymom" },
19        "predicate": { "type": "uri", "value": "http://www.w3.org/1999/02/22-rdf-syntax-ns#type" },
20        "object": { "type": "uri", "value": "http://www.w3.org/2002/07/owl#NamedIndividual" }
21      },
22      {
23        "subject": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#backstorymom" },
24        "predicate": { "type": "uri", "value": "http://www.w3.org/1999/02/22-rdf-syntax-ns#type" },
25        "object": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clinton" }
26      }
27     ]
28   }
29 }
```

3. Select query on subjects Clinton, trump and using predicate Election



The screenshot shows a web browser window with the address bar displaying `localhost:3030/dataset.html?tab=upload&ds=/election`. The browser's tab bar includes links to Apps, Google, Gmail, Welcome, Vilas, Pathway, GitHub, Instructor Led On, mailbox, University of Mis, K-ROO | UMKC S, Bank of America, myhr, SA: Home, and KDM-sheet.

The main content area is divided into two sections. The top section contains a SPARQL query:

```
1
2
3 SELECT ?clinton ?trump
4 WHERE {
5   ?clinton ?election ?trump
6 }
7 LIMIT 25
```

The bottom section, titled "QUERY RESULTS", has two tabs: "Table" and "Raw Response". The "Raw Response" tab is selected, displaying the query results in JSON format:

```
1 {
2   "head": {
3     "vars": [ "clinton", "trump" ]
4   },
5   "results": {
6     "bindings": [
7       {
8         "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#fanatical" },
9         "trump": { "type": "uri", "value": "http://www.w3.org/2002/07/owl#amedIndividual" },
10      },
11      {
12        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#fanatical" },
13        "trump": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clinton" },
14      },
15      {
16        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#backstorymon" },
17        "trump": { "type": "uri", "value": "http://www.w3.org/2002/07/owl#amedIndividual" },
18      },
19      {
20        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#backstorymon" },
21        "trump": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clinton" },
22      },
23      {
24        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clioy" },
25        "trump": { "type": "uri", "value": "http://www.w3.org/2002/07/owl#amedIndividual" },
26      },
27      {
28        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clioy" },
29        "trump": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clinton" },
30      },
31      {
32        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#jeremiahwright" },
33        "trump": { "type": "uri", "value": "http://www.w3.org/2002/07/owl#amedIndividual" },
34      },
35      {
36        "clinton": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#jeremiahwright" },
37        "trump": { "type": "uri", "value": "https://www.kdm.com/OWL/Election#clinton" },
38      },
39    ]
40  }
```