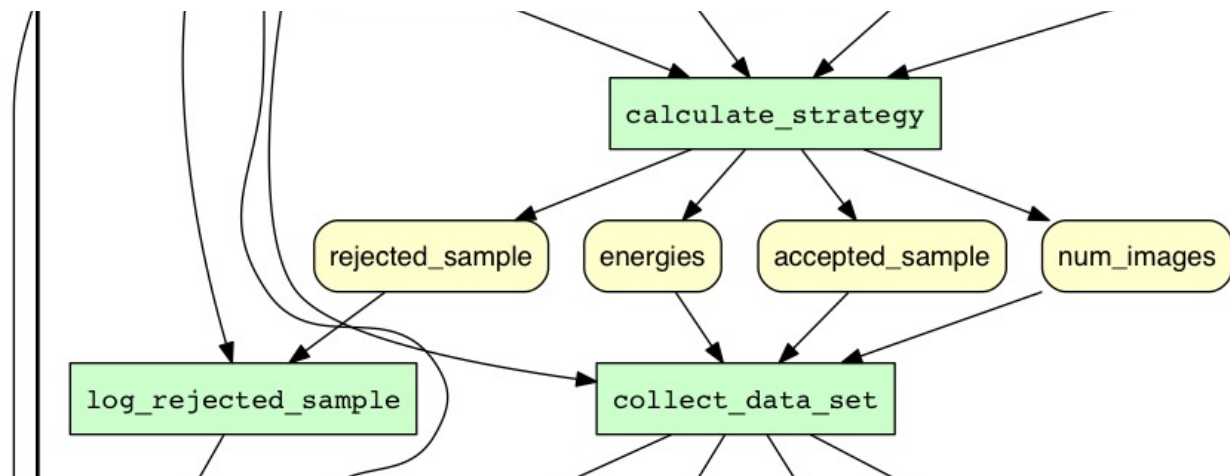
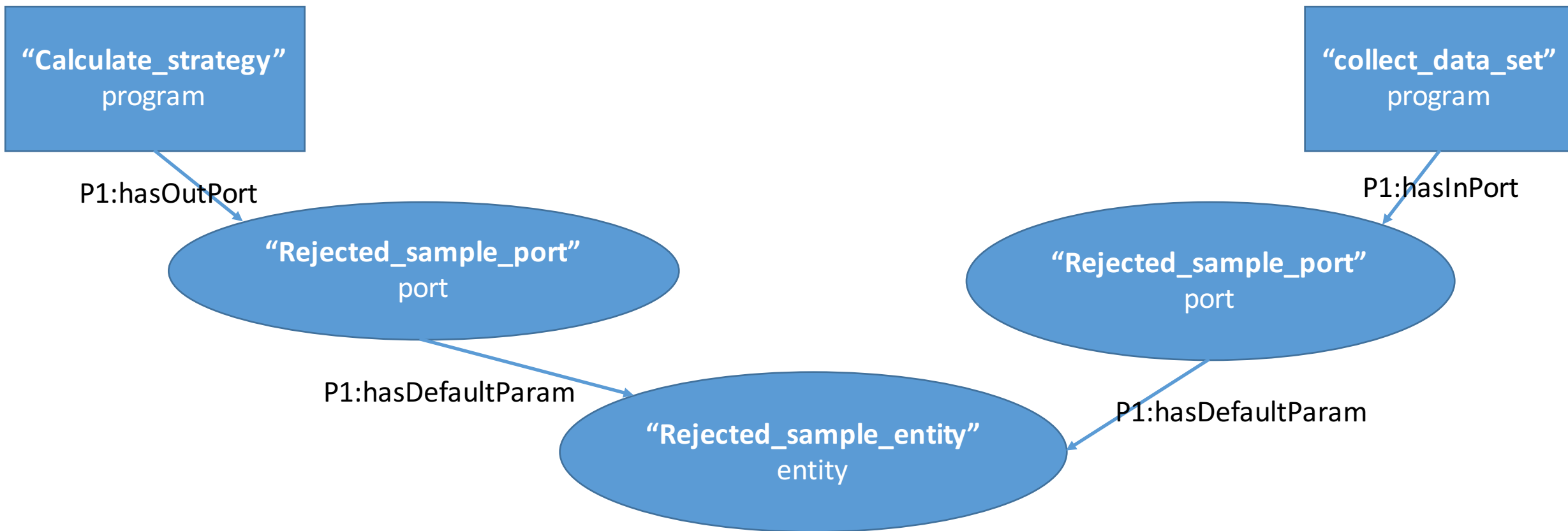


# SPARQL QUERIES

By Linh Hoang



("Query 11: What program blocks are immediately downstream of calculate\_strategy?");

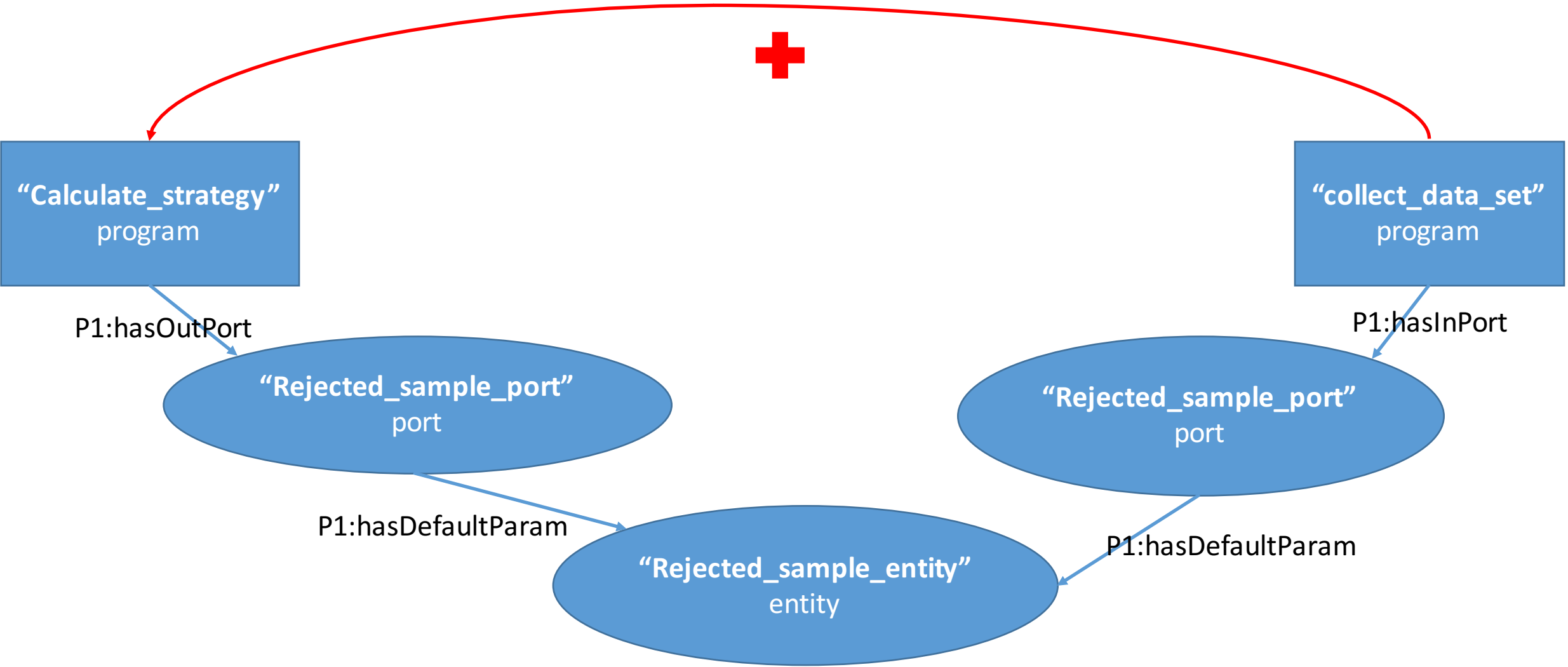


```

142 print ("Query 11: What program blocks are immediately downstream of calculate_strategy?");
143
144 SPARQL BASE      <http://yesworkflow.org/0000000000/>
145 PREFIX rdf:      <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
146 PREFIX rdfs:     <http://www.w3.org/2000/01/rdf-schema#>
147 PREFIX owl:    <http://www.w3.org/2002/07/owl#>
148 PREFIX prov:     <http://www.w3c.org/ns/prov#>
149 PREFIX p1:       <http://dataone.org/ns/provone#>
150 PREFIX yw:       <http://yesworkflow.org/ns/yesworkflow>
151
152 SELECT DISTINCT ?down_program_name    #Get the direct downstream program name
153 WHERE
154 {   #get the program with name "calculate_strategy" and put into ?program variable
155     ?program      rdf:type              p1:Program ;
156                   rdfs:label            "calculate_strategy" .
157
158     #get all of the programs immediately connect to ?program (via ?hasOutPort, hasInPort, hasDefaultParam relationships)
159     #put these programs into ?down_program variable
160     ?program      (p1:hasOutPort/p1:hasDefaultParam/^p1:hasDefaultParam/^p1:hasInPort)    ?down_program .
161
162     #get names of the down programs
163     ?down_program  rdf:type              p1:Program ;
164                   rdfs:label            ?down_program_name .
165
166 };

```

How about recursive query: What program blocks are downstream of calculate\_strategy?");



```

217 print ("Query 14: What program blocks are anywhere downstream of calculate_strategy?");
218
219 SPARQL BASE      <http://yesworkflow.org/0000000000/>
220 PREFIX rdf:      <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
221 PREFIX rdfs:      <http://www.w3.org/2000/01/rdf-schema#>
222 PREFIX owl:      <http://www.w3.org/2002/07/owl#>
223 PREFIX prov:      <http://www.w3c.org/ns/prov#>
224 PREFIX p1:        <http://dataone.org/ns/provone#>
225 PREFIX yw:        <http://yesworkflow.org/ns/yesworkflow>
226
227 SELECT DISTINCT ?down_program_name
228 WHERE
229 {
230     ?program      rdf:type          p1:Program ;
231                   rdfs:label        "calculate_strategy" .
232
233     ?program      (p1:hasOutPort/p1:hasDefaultParam/^p1:hasDefaultParam/^p1:hasInPort)+ ?down_program .
234
235     ?down_program  rdf:type          p1:Program ;
236                   rdfs:label        ?down_program_name .
237 };

```