

WEB SEMANTICS

- Reminder that when we do "Select ?x ?y ?z", we are searching for things that fit our category: "where ?x rdf:type :Island; located in water ?y, rdf:type, ?y lake; ?z :SomeObj." That way we can search for some kind of sub pred object triple, and find all that fits our pattern.
- We can see from our querying that organization of your data will dictate how easy/what information ppl can readily access, which ↑ the importance of your structure organization.
- Reminder that **blank node** is denoted with **[]** (brackets.)
- For instance: "find the rivers that flow through a lake (more than one.)."

" Select

?r ?l.

defining a term "r"

where { ?r a :River.

defining a term "l."

?r : flowsThrough ?l. ?l a :Lake } **groupby ?r having (count(?l) > 1)**

* having the **groupby** term here, allows us to see the rivers that has more than one ?l that it flows through.

- SPARQL allows you to use regex in the filters, which allows us to filter on text. (in class our examples were filtering ?x markers.)

RDFS : meaning RDF Schema.

- It's a vocabulary to define RDF graphs. (so we can talk about graphs in more unified/structured way.)
- I.e. if there is a triple `s rdf:type apple`, then that means the node `s` is a node of the `apple` **class**, where `:apple a rdf:Class`.
- Note that an object can be of **multiple classes**.
- Understanding **Subclasses**: if every instance of `X` is also an instance of `Y`, then `X` is a subclass of `Y` (naturally intuitive from coding/math.) Subclasses are also **transitive**.
- Usually we keep instances and classes separate, and it may be good practice anyways, but RDF graphs have no hard constraint on such actions.
- Usage of **Friend of a Friend** (foaf) "tag", allows you to connect and describe the people in your graph.