

Exercise Sheet 09

Task 1

2 p.

Explain the differences and advantages/ disadvantages of RDF and LPGs.

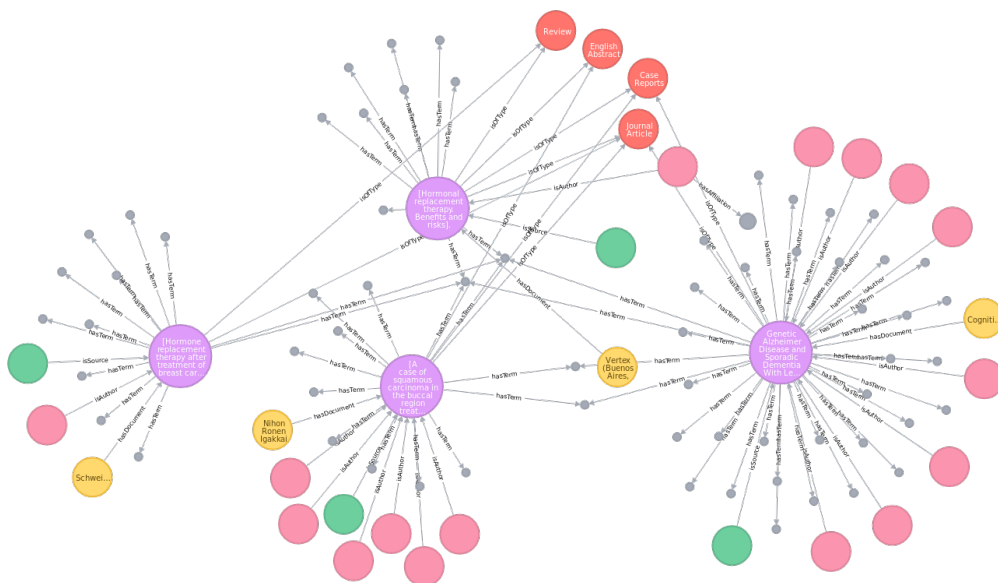
Task 2

2 p.

The following KG G comprises different layers: A document layer (purple), an annotation layer (gray), affiliations (yellow), authors (red), and sources (green).

Given a node $n \in V(G)$ we want to compute the semantic graph embedding $\mathcal{E}_L(n)$ of node n limited to the layer L .

Provide a pseudocode implementation and show its time complexity.



Task 3

2 p.

Proof: An induced subgraph of an interval graph is an interval graph.

Task 4

4 p.

Proof: An interval graph satisfies the triangulated graph property.

Task	1	2	3	4	total
Points	2	2	2	4	10
reached					