

PGT Exam Performance Feedback

2016/2017 Semester 1

COMP62421 Querying Data on the Web

Alvaro Fernandes

Comments Q1

Q1 proved extremely hard. The major problems were: (i) in item (c), a generalized lack of understanding of what generalized projection is (viz., the extension of normal projection with the ability to, broadly, do renaming and produce values for derived attributes (most importantly, aggregates) and, (ii) in item (d), the vast majority of students failed even to attempt it, with those who did stumbling on one or more of: mixing pre- and post-optimized versions (the former was correct, the latter not), failing to produce the stages in proper order (e.g., many students applied projection after aggregation, whereas in fact the former preceded the latter).

Q2

Q2 proved hard but not nearly as hard as Q1. The major recurring problems were: (i) poor recall of the answer to item (a), (ii) in item (b.i) an erroneous decomposition of the conjunction into a union rather than a sequence of selections and in (b.ii) an erroneous concatenation of the projection lists, and (iii) in item (d), a recurring error was to forget that often when projections are pushed, the original projection is retained nonetheless.

Q3

Q3 proved a bit harder than Q2 but still much less hard than Q1. Some recurring problems were: (i) poor recall of the what a static and a dynamic semantics are (briefly, the former is used at run time to determine that an expression is well-typed, whilst the latter is run time in the sense that it guides the construction of an interpreter by stating how, given inputs, operations compute outputs), (ii) in item (c), many students translated the XPath expression into XQuery Core, not FLWOR as the question asked, but this was marked as leniently as possible, and (iii) in item (d), the recall of the use of equivalence laws to reduce an expression to its value was very very poor.

Q4

Q4 proved a little easier than Q3. The recurring problems were: (i) recall of taught notions was very poor throughout the question, (ii) there was confusion between representing in tabular form the mappings that are returned by SPARQL evaluation and the mapping of RDF graphs into tables for storage in relational DBMSs.

Q5

This question proved almost as easy/difficult as Q2. The major issue was lack of recall of the topics in items (a)-(d). On the other hand, the vast majority of students did well on item ϵ , which had a very high average mark.
