This exercise explores the *AQuery* paper.[1]

1. List the members of your group below. Underline your name.

2. Provide illustrative examples of *arrables* that are order equivalent and those that are not. Explain your examples briefly.

3. Provide an illustrative examples of a 5-array arrable that is *ordered by* a 3-element subset of its arrays. Determine all other arrays by which your example is also ordered. Explain your examples briefly.

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[1] Alberto Lerner and Dennis Shasha, "AQuery: Query Language for Ordered Data, Optimization Techniques, and Experiments," in *Proceedings of the 29th International Conference on Very Large Data Bases (VLDB)* (Berlin, Germany, 2003).

4. Prove or disprove (see Definition 4): If $r \equiv_{\{\}} s$ then $P(r) = s$ for some permutation P.

5. Provide an implementation of the *prev* function over an array (Section 2.2).

6. Provide examples illustrating the action of the projection and selection operators (Definitions 6 and 7).

7. Provide declarative specifications of the projection and selection operators.