

## Part 1 - Persist Data

For each set of data to be persisted, it has an object class, a record class, a fileEditor class and a thread class. The concurrentSolution will run the four packages to generate the 4 .dat files for use in queries.

## Part 2 - Query Data

Classes: QueryData.java -> QueryThread -> XxxFileEditor

- 1) QueryData will first call method in ReadWriteCsv.java to read the specified number of rows from PDPAssignment8.csv.
- 2) Then it will create instances of XxxFileEditor, which provide read/write access to the 4 RandomAccessFile created in part 1: "skier.dat", "liftrides.dat", "hours.dat", "lift.dat"
- 3) Then QueryData will partition all the query rows into 20 chunks and pass them along with 4 XxxFileEditor to 20 QueryThread.
- 4) Each QueryThread will process its query rows by calling the read and write APIs for corresponding RandomAccessFile
- 5) Each QueryThread will aggregate an output string from each query result, and print the output string to file once it finishes processing all its queries