Github link: https://github.com/1peterholmes1/ClassProjectPart2

For this part of the project, I decided to use the KeySelector part of the FoundationDB API in order to keep track of where I was pointing to in the database table. In order to do this, getFirst() and getLast() would target the first (or last) key within the range of the table's DirectorySubspace. In the case of a query cursor, it would iterate through until it found a matching record. The iteration through the records was accomplished by starting with a max offset of the number of attributes specified within the schema. But since this is an upper limit for these values, every time the cursor moves through the table, it checks each key's primarykey entry in the tuple against the one it pulled first and if it matches it fills out a Record object. If the value changed, then it returned, since it had already hit the next record in the table. Its position was saved in a KeySelector member variable of the cursor so that if the record needs to be updated or deleted, the cursor still has access. The transaction capability of the cursor was very simple since I could just give it a transaction member variable and FDB would take care of that part of it as long as I called commit() and abort() when specified by the user.