CSE 512 – Assignment 2

This assignment is a **GROUP** assignment; each group (based on the groups formed for the class project) of students . The required task is to build a simplified query processor that accesses data from the partitioned ratings table (partitioned using the Python functions you implemented in Assignment 1).

Input Data. Same as in Assignment 1

Required Task. Below are the steps you need to follow to fulfill this assignment:

1. Implement a Python function `RangeQuery()` that takes as input: (1) `Ratings` table stored in PostgreSQL, (2) `RatingMinValue`. `RangeQuery()` then returns all tuples for which the rating value is larger than or equal to `RatingMinValue` and less than or equal to `RatingMaxValue`. The returned tuples should be stored in a text file, named `RangeQueryOut.txt` such that each line represents a tuple that has the following format such that PartitionID represents the name (or ID) of the partition in which this tuple resides.

   PartitionID — UserID — MovieID — Rating

2. Implement a Python function `PointQuery()` that takes as input: (1) `Ratings` table stored in PostgreSQL, (2) `RatingValue`. `PointQuery()` then returns all tuples for which the rating value is equal to *RatingValue*. Same as in `RangeQuery()`, the returned tuples should be stored in a text file, named `PointQueryOut.txt`.

Note. Note that both `RangeQuery()` and `PointQuery()` assume that the `Ratings` table is already partitioned using either *Range Partitioning* or *Round Robin Partitioning* (implemented in Assignment 1). Since this is a group assignment, you may choose to implement Assignment 2 based upon the best Assignment 1 implementation of all group members.

Deadline. Thursday, Mar 19th 2015 (5:00 pm). Groups should submit their assignment at 5:00 pm before class. Each group should come prepared to grade their assignment in Mar 19th class.