DB PROJECT
Deliverable 2

Aim : Implement a Database system to validate sql query and execute CREATE command.

You need to implement the following public methods :

    void queryType(String query) {

            /*
                    Determine the type of the query (select/create) and
                    invoke appropriate method for it.
            */
    }

    void createCommand(String query) {

            /*
                    Use any SQL parser to parse the input query. Check if the table doesn't exists
                    and execute the query.

                    The execution of the query creates two files : <tablename>.data and
                    <tablename>.csv. An entry should be made in the system config file used
                    in previous deliverable.

                    Print the query tokens as specified at the end.

                    **format for the file is given below
            */
    }

    void selectCommand(String query) {

            /*
                    Use any SQL parser to parse the input query. Perform all validations (table
                    name, attributes, datatypes, operations). Print the query tokens as specified
                    below.
            */
    }

File Formats :
<tablename>.data
        Attribute1:Datatype,Attribute2:Datatype,...

Input/Output format :

    1. Input : select <col1>,<col2> from <tablename>;
       Output :
            Querytype:select
            Tablename:<tablename>
            Columns:<col1>,<col2>
            Distinct:NA

Condition:NA
Orderby:NA
Groupby:NA
Having:NA

2. Input : select distinct(<col1>) from <table name> where <col1> <op> <value>;
    Output :
        Querytype:select
        Tablename:<tablename>
        Columns:<col1>
        Distinct:<col1>
        Condition:<col1> <op> <value>
        Orderby:NA
        Groupby:NA
        Having:NA

3. Input : select * from <table1>, <table2> where <col1>=<col2> groupby <col1> having
    <col1>=50 orderby <col2>;
    Output:
        Querytype:select
        Tablename:<table1>,<table2>
        Columns:<col1>,<col2>,..
        Distinct:NA
        Condition:<col1>=<value>
        Orderby:<col2>
        Groupby:<col1>
        Having:<col1>>=50

4. Input : create table <table1> (<col1> <datatype>,<col2> <datatype>,....)
    Output:
        Querytype:create
        Tablename:<table1>
        Attributes:<col1> <datatype>,<col2> <datatype>...

5. Input : select <col1>,<col2> from <non_existing_table>
    Output:
        Query Invalid

Print "Query Invalid" if the query is invalid else print as mentioned above.

"Do a complete analysis of how parameters in the config file like No. of pages, pageSize (or any other parameter which you took into account while implementation) effect LRU caching. The anlaysis should be supported by appropriate graphs, visuals etc. Generate some datasets to try with different values of these parameters."

Due Date: 11:59 pm, 26 September 2014