

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) {  
    /*  
        Deteremine 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.

Due Date: 11:59 pm, 12 February 2014