Big Data Management
Programming Assignment #4
Hive

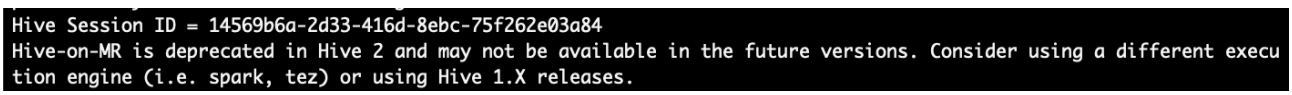
Login and Setup:

Step 1: Login into Hadoop Cluster using ssh command and password

Step 2: Create a Metastore db as shown in the screenshot

Step 3: Initiate the derby Schema as shown in the screenshot

Step 4: Start Hive shell using hive command



Creating and Description of Database:

Task 1: Create a table using HIVEThe table must contain the following types of fields: string, MAP, ARRAY, STRUCT and it must be partitioned.

Step 1: I have created a Database and named it as “achyu”

```
hive> create database achyu location '/user/anagave/achyu';
OK
Time taken: 0.731 seconds
```

Step 2: To check the database

```
hive> show databases;
OK
achyu
default
Time taken: 0.281 seconds, Fetched: 2 row(s)
```

Step 3: To Use the Database

```
hive> use achyu;
OK
Time taken: 0.072 seconds
```

Step 4: Create two tables

Table 1:

Table name : MASCOT
Number of Columns : 2 Columns
Number of Rows : 6 Rows
Names of Columns : “id” which is an Integer
“mascot” which is a String, which contains mascot of each college

```
hive> create table mascot(id int, mascot string);
OK
Time taken: 0.822 seconds
```

```
hive> select * from mascot;
OK
101     Pistol Pete
102     Brutus Buckeye
103     Raider Red
104     WuShock
105     Beaver
106     Sparty
```

Table 2:

Table name : COLLEGE
Number of Columns : 5 Columns
Number of Rows : 6 Rows
Names of Columns : 1.“id” which is an Integer
2.“name” which is a String
3.“phones” which is an Integer
4.“place” which is a Struct type contains two parameters one is city and other is state.
5.“corecourses” which is a MAP type, Which contains both string and integer
6.The table is PARTIONED by Country name which is a String

```
hive> create table College (id int, name string, phones array<int>, place struct<city:string,State:string>, corecour
ses Map<string,int>) PARTITIONED BY (Country String);
OK
```

Table 2: College

```
hive> select * from College;
OK
103     Ariana  [1215678903,1217504890] {"city":"Lubbock","state":"Texas"}     {"OS":2,"DS":2}  US
102     Lee     [1215678903,1217504890] {"city":"Columbus","state":"Ohio"}     {"DS":2,"FLT":2} US
106     Tina    [1215678903,1217504890] {"city":"East Lansing","state":"Michigan"}      {"COA":2,"DS":2}        US
101     Kim     [2127893564,2121123546] {"city":"Stillwater","state":"Oklahoma"{"COA":2,"OS":2} US
105     Lee     [212128978,212976542]   {"city":"PASADENA","state":"Calfornia"}{"FLT":2,"DS":2} US
104     John    [212120201,212456392]   {"city":"Wichita","state":"Kansas"}    {"OS":2,"DS":2}  US
Time taken: 0.163 seconds, Fetched: 6 row(s)
```

Step 4: Show tables

```
hive> show tables;
OK
college
mascot
Time taken: 0.074 seconds, Fetched: 2 row(s)
```