Hive Custom Types

Arrays

#Create New Table based on Array Type

```
create table student
(
id int,
name string,
course array<string>
fees double
)
row format delimited
fields terminated by ','
collection items terminated by '$';
```

#Insert Records into Table

```
insert into student
values(1,"Ankit",array('C','C++','Java'),45000);

#To Load Data from File
1,Ankit,C$C++$Java,45000
```

#Display Records from the Table

```
select name,course[0] from student;
select name,course[0],course[1] from student;
```

Maps

#Create New Table based on Maps Type

```
create table course
(
        id int,
        name string,
        subject map<string , int>,
        fees double
)
row format delimited
fields terminated by ','
collection items terminated by '$'
map keys terminated by '#';
```

#Insert Records into Table

```
insert into course
values('1','CS',map('C',40),5000);

#To Load Data from File
1,CS,C#40,5000
```

#Display Records from the Table

```
select * from course;
select subject['C'] from course;
```

Structs

#Create New Table based on Structs Type

```
create table person
(
id int,
name string,
address struct<city:string,state:string,pin:bigint>
)
row format delimited
fields terminated by ','
```

#Insert Records into Table

```
insert into person
values(1,'Ankit',named_struct('city','Delhi','state','Delhi','pin',110034));

#To Load data from File
1,Ankit,Delhi$Delhi$110042)
```

#Display Records from the Table

```
select * from person;
select address.city,address.state from person;
```

Assignment

1. Create a table 'complexstruct' with following properties:

   name   string
   courses   array<struct<course:string,fees:double>>

   Insert 2 Records in the complextable

2. Create a table 'complexarray' with following properties:

   name   string
   bio   struct<interest:string,hobbies:array<string>>

   Insert 2 Records in complexarray