complex data structures Array,map,struct

```
0: jdbc:hive2://> create table mobilephones (
. . . . . . . . > id string,
. . . . . . . . > title string,
. . . . . . . . > cost float,
. . . . . . . . > colors array,
. . . . . . . . > screen_size array
. . . . . . . . > );
OK
No rows affected (0.167 seconds)


0: jdbc:hive2://> insert into table mobilephones
. . . . . . . . > select "redminote7","Redmi Note 7",300,
. . . . . . . . > array("white", "silver", "black"),array (float(4.5))
. . . . . . . . > UNION ALL
. . . . . . . . > select "motoGplus","Moto G Plus",200,array("black", "gold"),
. . . . . . . . > array(float(4.5), float(5.5));


0: jdbc:hive2://> select id,colors[0] from mobilephones;
18/02/20 12:50:46 [7ec656d4-a360-4176-8f6c-f86019c94765 main]: WARN
translator.SqlFunctionConverter: The function text was empty, name from annotation is
index
OK
+-------------+--------+--+
| id | c1 |
+-------------+--------+--+
| redminote7 | white |
| motoGplus | black |
+-------------+--------+--+


0: jdbc:hive2://> drop table mobilephones;
OK
No rows affected (2.408 seconds)
0: jdbc:hive2://> create table mobilephones (
. . . . . . . . > id string,
. . . . . . . . > title string,
. . . . . . . . > cost float,
. . . . . . . . > colors array,
. . . . . . . . > screen_size array
. . . . . . . . > )
. . . . . . . . > row format delimited fields terminated by ','
. . . . . . . . > collection items terminated by '#';0: jdbc:hive2://> select
```

id,features['camera'] from mobilephones;
18/02/20 15:01:58 [7ec656d4-a360-4176-8f6c-f86019c94765 main]: WARN
translator.SqlFunctionConverter: The function text was empty, name from annotation is
index
OK
+-------------+-------+--+
| id | c1 |
+-------------+-------+--+
samsungj7	NULL
onplusthree	NULL
	NULL
+-------------+-------+--+

[root@localhost apache-hive-2.1.1-bin]# nano mobilephones.csv

samsungj7, Samsung J7, 250,red#blue#black#, 5.5
onplusthree, One Plus Three, 450, gold#silver, 4.5#5.5

No rows affected (0.202 seconds)
0: jdbc:hive2://> load data local inpath 'mobilephones.csv'
. . . . > into table mobilephones;
Loading data to table pluralsight.mobilephones
OK
No rows affected (0.472 seconds)
0: jdbc:hive2://> select * from mobilephones;

... 27 more
Error: Error while compiling statement: FAILED: ParseException line 2:0 cannot
recognize input near '.' '.' '.' in column name or primary key or foreign key
(state=42000,code=40000)
0: jdbc:hive2://> create table mobilephones (
. . . . > id string,
. . . . > title string,
. . . . > cost float,
. . . . > colors array,
. . . . > screen_size array,
. . . . > features map
. . . . >)
. . . . > row format delimited fields terminated by ','
. . . . > collection items terminated by '#'
. . . . > map keys terminated by ':';

nano mobilephoes.csv

samsungj7, Samsung J7, 250,red#blue#black#, 5.5, camera:true#dualsim:false
onplusthree, One Plus Three, 450, gold#silver, 4.5#5.5,autofocus:true

```
0: jdbc:hive2://> load data local inpath 'mobilephones.csv'
. . . . . . . . > into table mobilephones;
Loading data to table pluralsight.mobilephones

0: jdbc:hive2://> select * from mobilephones;
OK
+-----------------+-------------------+------------------+-------------------------+--------------------
------+---------------------------------+--+
| mobilephones.id | mobilephones.title | mobilephones.cost | mobilephones.colors |
mobilephones.screen_size | mobilephones.features |
+-----------------+-------------------+------------------+-------------------------+--------------------
------+---------------------------------+--+
| samsungj7 | Samsung J7 | 250.0 | ["red","blue","black",""] | [5.5] | {"
camera":true,"dualsim":false} |
| onplusthree | One Plus Three | 450.0 | [" gold","silver"] | [4.5,5.5] | {"autofocus":true} |
| | NULL | NULL | NULL | NULL | NULL |
+-----------------+-------------------+------------------+-------------------------+--------------------
------+---------------------------------+--+
3 rows selected (0.223 seconds)

0: jdbc:hive2://> select id,features['camera'] from mobilephones;
18/02/20 15:01:58 [7ec656d4-a360-4176-8f6c-f86019c94765 main]: WARN
translator.SqlFunctionConverter: The function text was empty, name from annotation is
index
OK
+--------------+-------+--+
| id | c1 |
+--------------+-------+--+
| samsungj7 | NULL |
| onplusthree | NULL |
| | NULL |
+--------------+-------+--+

0: jdbc:hive2://> create table mobilephones (
. . . . . . . . > id string,
. . . . . . . . > title string,
. . . . . . . . > cost float,
. . . . . . . . > colors array,
. . . . . . . . > screen_size array,
. . . . . . . . > features map ,
. . . . . . . . > information struct
. . . . . . . . > )
. . . . . . . . > row format delimited fields terminated by ','
```

. . . . > collection items terminated by '#'
. . . . > map keys terminated by ':';

```
create table mobilephones (
id string,
title string,
cost float,
colors array,
screen_size array,
features map ,
information struct
)
row format delimited fields terminated by ','
collection items terminated by '#'
map keys terminated by ':';
```

https://stackoverflow.com/questions/42690210/error-applying-authorization-policy-on-hive-configuration-couldnt-create-direc

bin/beeline -u jdbc:hive2://

could only be replicated to 0 nodes instead of minReplication (=1). There are 1 datanode(s) running and no node(s) are excluded in this operation.

Error: Error while processing statement: FAILED: Execution Error, return code 1 from org.apache.hadoop.hive.ql.exec.MoveTask.
org.apache.hadoop.ipc.RemoteException(java.io.IOException): File /user/hive/warehouse/pluralsight.db/mobilephones/mobilephones_copy_2.csv could only be replicated to 0 nodes instead of minReplication (=1). There are 1 datanode(s) running and no node(s) are excluded in this operation.