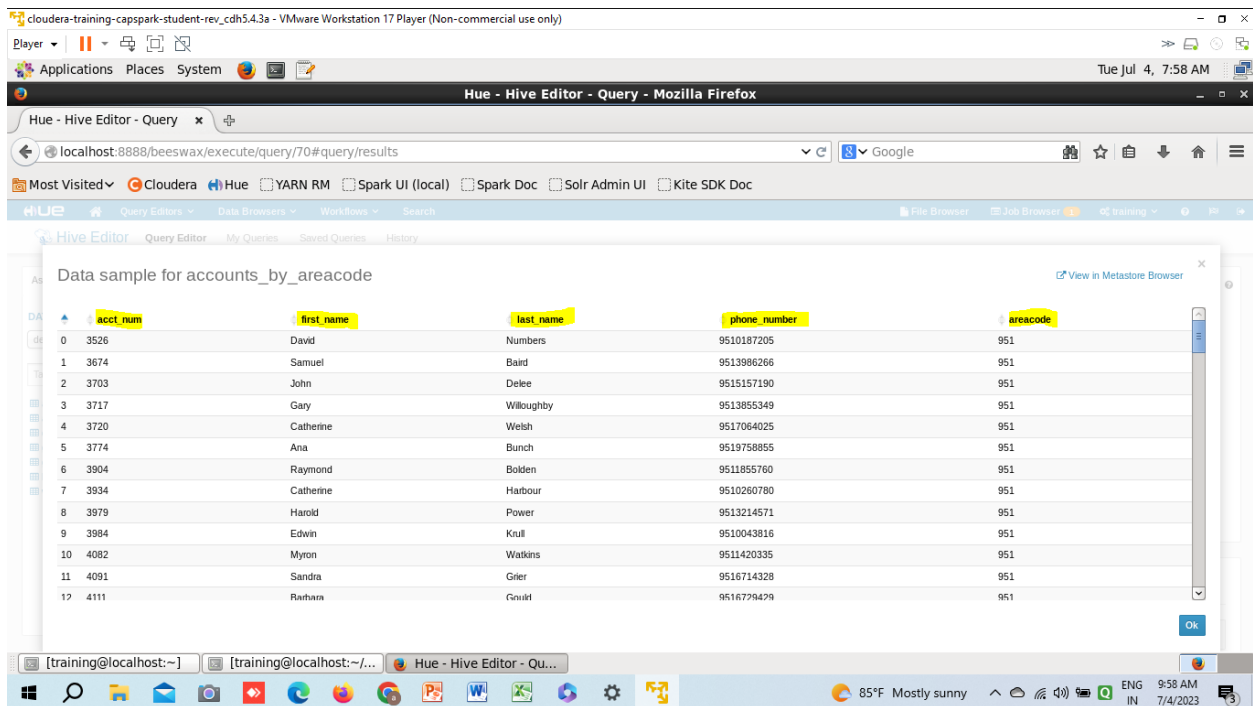


# LAB 7 BIG DATA

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**Answer: The desirable outputs of LAB 7 are as follows in the 2 immediate screenshots below:**



The screenshot displays the Hue Hive Editor interface within a Mozilla Firefox browser. The URL bar shows 'localhost:8888/execution/query/70#query/results'. The main content area is titled 'Data sample for accounts\_by\_areacode' and contains a table with 13 rows of data. The table has five columns: 'acct\_num', 'first\_name', 'last\_name', 'phone\_number', and 'areacode'. The data is as follows:

	acct_num	first_name	last_name	phone_number	areacode
0	3526	David	Numbers	9510187205	951
1	3674	Samuel	Baird	9513986266	951
2	3703	John	Delee	9515157190	951
3	3717	Gary	Willoughby	9513855349	951
4	3720	Catherine	Welsh	9517064025	951
5	3774	Ana	Bunch	9519758855	951
6	3904	Raymond	Bolden	9511855760	951
7	3934	Catherine	Harbour	9510260780	951
8	3979	Harold	Power	9513214571	951
9	3984	Edwin	Knull	9510043816	951
10	4082	Myron	Watkins	9511420335	951
11	4091	Sandra	Grier	9516714328	951
12	4111	Ruthana	Condit	9516779429	951

```
cloudera-training-capspark-student-rev_cdh5.4.3a - VMware Workstation 17 Player (Non-commercial use only)
Player | Applications | Places | System | Tue Jul 4, 8:01 AM
training@localhost:~
File Edit View Search Terminal Help
[training@localhost ~]$ sudo service hive-server2 start
Started Hive Server2 (hive-server2): [ OK ]
[training@localhost ~]$ hdfs dfs -ls /loudacre/account_by_areacode
ls: '/loudacre/account_by_areacode': No such file or directory
[training@localhost ~]$ hdfs dfs -ls /loudacre/accounts_by_areacode
[training@localhost ~]$ hdfs dfs -ls /loudacre
Found 7 items
drwxrwxrwx - training supergroup 0 2023-06-15 08:20 /loudacre/accounts
drwxrwxrwx - training supergroup 0 2023-07-04 06:05 /loudacre/accounts_avro
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode
drwxrwxrwx - training supergroup 0 2023-06-28 06:19 /loudacre/input_file
drwxrwxrwx - training supergroup 0 2023-06-13 00:40 /loudacre/kb
-rw-rw-rw- 1 training supergroup 1574 2023-07-04 06:21 /loudacre/sqoop_import_accounts.avsc
drwxrwxrwx - training supergroup 0 2023-06-15 07:57 /loudacre/webpage
[training@localhost ~]$ hdfs dfs -ls /loudacre/accounts_by_areacode
Found 31 items
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/.hive-staging_hive_2023-07-04_07-57-11_833_447535822374462858-1
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=209
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=213
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=310
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=408
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=415
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=424
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=503
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=510
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=530
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=541
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=559
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=562
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=619
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=626
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=650
drwxrwxrwx - training supergroup 0 2023-07-04 07:58 /loudacre/accounts_by_areacode/areacode=657
```

I am adding all the steps which led me to the above outputs just for the safer side; please find the screenshots of all the steps outputs below:

cloudera-training-capspark-student-rev\_cdh5.4.3a - VMware Workstation 17 Player (Non-commercial use only)

Player | Applications | Places | System | Tue Jul 4, 7:47 AM

Hue - Hive Editor - Query - Mozilla Firefox

Hue - Hive Editor - Query x

localhost:8888/beeswax/execute/query/61#query/results

Most Visited | Cloudera | Hue | YARN RM | Spark UI (local) | Spark Doc | Solr Admin UI | Kite SDK Doc

HUE | Query Editors | Data Browsers | Workflows | Search | File Browser | Job Browser | training |

Hive Editor | Query Editor | My Queries | Saved Queries | History

Assist | Settings

DATABASE: default

Table name...

accounts\_avro  
accounts\_by\_areacode  
device  
geolocation\_stage  
geolocation\_stage1  
loud  
webpage

```
1 SET hive.exec.dynamic.partition=true;
2 SET hive.exec.dynamic.partition.mode=nonstrict;
3
4
5
6
7
8
9 CREATE EXTERNAL TABLE accounts_by_areacode (
10   acct_num INT,
11   first_name STRING,
12   last_name STRING,
13   phone_number STRING)
14   PARTITIONED BY (areacode STRING)
15   ROW FORMAT DELIMITED
16   FIELDS TERMINATED BY ','
17   LOCATION '/loudacre/accounts_by_areacode';
18
19 SELECT
20   acct_num,
21   first_name,
22   last_name,
23   phone_number,
24   SUBSTR(phone_number,1,3) AS areacode
25 FROM accounts_avro;
```

Execute Save as... Explain or create a New query

Recent queries Query Log Columns Results Chart

	acct_num	first_name	last_name	phone_number	areacode
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cloudera-training-capspark-student-rev\_cdh5.4.3a - VMware Workstation 17 Player (Non-commercial use only)

Player | Applications | Places | System | Tue Jul 4, 7:46 AM

Hue - Hive Editor - Query - Mozilla Firefox

Hue - Hive Editor - Query x

localhost:8888/beeswax/execute/query/61#query/results

Most Visited | Cloudera | Hue | YARN RM | Spark UI (local) | Spark Doc | Solr Admin UI | Kite SDK Doc

HUE | Query Editors | Data Browsers | Workflows | Search | File Browser | Job Browser | training |

Hive Editor | Query Editor | My Queries | Saved Queries | History

default

Table name...

accounts\_avro  
accounts\_by\_areacode  
device  
geolocation\_stage  
geolocation\_stage1  
loud  
webpage

```
11 last_name STRING,
12 phone_number STRING)
13 PARTITIONED BY (areacode STRING)
14 ROW FORMAT DELIMITED
15 FIELDS TERMINATED BY ','
16 LOCATION '/loudacre/accounts_by_areacode';
17
18 SELECT
19   acct_num,
20   first_name,
21   last_name,
22   phone_number,
23   SUBSTR(phone_number,1,3) AS areacode
24 FROM accounts_avro;
```

Execute Save as... Explain or create a New query

Recent queries Query Log Columns Results Chart

	acct_num	first_name	last_name	phone_number	areacode
0	1	Donald	Becton	5100032418	510
1	2	Donna	Jones	4150835799	415
2	3	Dorothy	Chalmers	6506877757	650
3	4	Leila	Spencer	6503198619	650

cloudera-training-capspark-student-rev\_cdh5.4.3a - VMware Workstation 17 Player (Non-commercial use only)

Player ▾ | Applications | Places | System | Tue Jul 4, 8:04 AM

Hue - Hive Editor - Query - Mozilla Firefox

Hue - Hive Editor - Query x

localhost:8888/beeswax/execute/query/70#query/results

Most Visited ▾ | Cloudera | Hue | YARN RM | Spark UI (local) | Spark Doc | Solr Admin UI | Kite SDK Doc

HUE | Query Editors ▾ | Data Browsers ▾ | Workflows ▾ | Search | File Browser | Job Browser | training ▾

Hive Editor | Query Editor | My Queries | Saved Queries | History

Assist | Settings

DATABASE | default ▾

Table name...

- accounts\_avro
- accounts\_by\_areacode
- device
- geolocation\_stage
- geolocation\_stage1
- loud
- webpage

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