HIVE ASSIGNMENT - 2

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ISE-A

Create following tables

Bank(Bank_id:integer, Bname: string, blocation:string)

Customer(Cust_id: integer, Cname: string, income:float, accid:int dob:date)

Account(accid int, cust_id: int,bnk_id: int);

Write the HiveQL queries for the above database schema

. Insert 5 records using INSERT command.

. Demonstrate the Alter command for the above tables

. Rename the table Account to Accounts.

. Rename the column name "blocation" to "location".

. Retrieve all the customers who have account in AXIS bank

. Retrieve the customer with maximum income and minimum income

. Retrieve all the customers who have account

. Retrieve all the customers whose income is not more than 20000

. Retrieve all the customers whose dob not between 10-10-1990 and 1-2-1993 group based on cust_id and sort the results in descending order

. Retrieve view which contains all the fileds from account and cname in it. Demonstrate update operation it

1. Creating Bank table and insert values

```
hdoop@ubuntu: ~/apache-hive-3.1.2-bin

File  Edit  View  Search  Terminal  Help
hive> show tables;
OK
account
bank
customer
Time taken: 0.042 seconds, Fetched: 3 row(s)
hive> desc bank;
OK
bank_id                 int
bname                   string
blocation               string
Time taken: 1.196 seconds, Fetched: 3 row(s)
hive> insert into bank values(100,"Canara","Bangalore");
Query ID = hdoop_20210701071347_7f757c1f-e268-46ec-a29e-42b0614ef830
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625148569832_0001, Tracking URL = http://ubuntu:8088/proxy/application_1625148569832_0001/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625148569832_0001
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-01 07:14:16,926 Stage-1 map = 0%,  reduce = 0%
2021-07-01 07:14:41,899 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 2.92 sec
2021-07-01 07:14:51,208 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 5.25 sec
MapReduce Total cumulative CPU time: 5 seconds 250 msec
Ended Job = job_1625148569832_0001
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/bank/.hive-staging_hive_2021-07-01_07-13-47_471_2355211306319758656
```

```
hdoop@ubuntu: ~/apache-hive-3.1.2-bin

File  Edit  View  Search  Terminal  Help
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625148569832_0003, Tracking URL = http://ubuntu:8088/proxy/application_1625148569832_0003/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625148569832_0003
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-01 07:18:00,843 Stage-1 map = 0%,  reduce = 0%
2021-07-01 07:18:07,073 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 2.58 sec
2021-07-01 07:18:14,357 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 4.62 sec
MapReduce Total cumulative CPU time: 4 seconds 620 msec
Ended Job = job_1625148569832_0003
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/bank/.hive-staging_hive_2021-07-01_07-17-51_704_5414029503095016519
-1/-ext-10000
Loading data to table bank.bank
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 4.62 sec   HDFS Read: 16814 HDFS Write: 323 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 620 msec
OK
Time taken: 24.041 seconds
hive> select * from bank;
OK
100     Canara  Bangalore
101     BOB     Mysore
102     SBI     Sirsi
103     ICICI   Dharwad
104     HDFC    Hubli
Time taken: 0.359 seconds, Fetched: 5 row(s)
hive>
```

2. Create customer table and inserting values

```
        at org.apache.hadoop.util.RunJar.main(RunJar.java:236)
FAILED: ParseException line 1:0 cannot recognize input near 'inser' 'into' 'customer'
hive> insert into customer values(200,"Adarsh",50000.00,1001,"2000-08-03"),(201,"Ashwini",30000.00,1002,"2004-01-02"),(202,"Asha",45000.00,100
3,"2000-07-27"),(203,"Nandan",25000.00,1004,"2000-4-23"),(204,"Anvith",40000.00,1005,"2005-05-09");
Query ID = hdoop_20210701073250_2f5b82ab-ea49-4242-8019-c46542ed295f
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1625148569832_0004, Tracking URL = http://ubuntu:8088/proxy/application_1625148569832_0004/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625148569832_0004
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2021-07-01 07:32:59,609 Stage-1 map = 0%,  reduce = 0%
2021-07-01 07:33:06,891 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 2.26 sec
MapReduce Total cumulative CPU time: 2 seconds 260 msec
Ended Job = job_1625148569832_0004
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/customer/.hive-staging_hive_2021-07-01_07-32-50_769_477152496865632
647-1/-ext-10000
Loading data to table bank.customer
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1   Cumulative CPU: 2.26 sec   HDFS Read: 6887 HDFS Write: 244 SUCCESS
Total MapReduce CPU Time Spent: 2 seconds 260 msec
OK
Time taken: 18.644 seconds
hive> select * from customer;
OK
200     Adarsh  50000.0 1001    2000-08-03
201     Ashwini 30000.0 1002    2004-01-02
202     Asha    45000.0 1003    2000-07-27
203     Nandan  25000.0 1004    2000-04-23
204     Anvith  40000.0 1005    2005-05-09
Time taken: 0.156 seconds, Fetched: 5 row(s)
hive>
```

```
hive> show tables;
OK
account
bank
customer
Time taken: 0.244 seconds, Fetched: 3 row(s)
hive> alter table account rename to accnt;
OK
Time taken: 1.582 seconds
hive> show tables;
OK
accnt
bank
customer
Time taken: 0.067 seconds, Fetched: 3 row(s)
hive> alter table customer add columns(Ph_No int);
OK
Time taken: 0.268 seconds
hive> desc customer;
OK
cust_id                 int
cname                   string
income                  float
accid                   int
dob                     date
ph_no                   int
Time taken: 0.078 seconds, Fetched: 6 row(s)
hive> select * from customer;
OK
200     Adarsh  50000.0 1001    2000-08-03      NULL
201     Ashwini 30000.0 1002    2004-01-02      NULL
202     Asha    45000.0 1003    2000-07-27      NULL
203     Nandan  25000.0 1004    2000-04-23      NULL
204     Anvith  40000.0 1005    2005-05-09      NULL
Time taken: 2.889 seconds, Fetched: 5 row(s)
```

3.Create account table and inserting values

File Edit View Search Terminal Help

```
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/bank/.hive-staging_hive_2021-07-01_09-23-11_909_816513730361019702-
1/-ext-10000
Loading data to table bank.bank
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 6.79 sec   HDFS Read: 16672 HDFS Write: 285 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 790 msec
OK
Time taken: 34.005 seconds
hive> desc account;
OK
acc_id                  int
cust_id                 int
bank_id                 int
Time taken: 0.07 seconds, Fetched: 3 row(s)
hive> drop table account;
OK
Time taken: 1.152 seconds
hive> create table account(acc_id int,cust_id int,bank_id int)row format delimited fields terminated by ",";
OK
Time taken: 0.352 seconds
hive> insert into account values(1001,200,100),(1002,201,105),(1003,202,102),(1004,203,105),(1005,204,103);
Query ID = hdoop_20210701093435_2b014fb9-8624-4a99-96fc-b164f7b92cce
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625156017830_0004, Tracking URL = http://ubuntu:8088/proxy/application_1625156017830_0004/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625156017830_0004
```

File Edit View Search Terminal Help

```
Loading data to table bank.account
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 5.93 sec   HDFS Read: 15612 HDFS Write: 321 SUCCESS
Total MapReduce CPU Time Spent: 5 seconds 930 msec
OK
Time taken: 35.765 seconds
hive> insert into account values(1003,202,102),(1004,203,105),(1005,204,103);
Query ID = hdoop_20210701093828_50371615-646b-440f-b5e3-be5565a1ea54
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625156017830_0006, Tracking URL = http://ubuntu:8088/proxy/application_1625156017830_0006/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625156017830_0006
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-01 09:38:37,858 Stage-1 map = 0%,  reduce = 0%
2021-07-01 09:39:09,740 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 7.27 sec
2021-07-01 09:39:18,627 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 9.89 sec
MapReduce Total cumulative CPU time: 9 seconds 890 msec
Ended Job = job_1625156017830_0006
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/account/.hive-staging_hive_2021-07-01_09-38-28_104_7158809991524998
459-1/-ext-10000
Loading data to table bank.account
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 9.89 sec   HDFS Read: 15715 HDFS Write: 347 SUCCESS
Total MapReduce CPU Time Spent: 9 seconds 890 msec
OK
```

```
    set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
    set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
    set mapreduce.job.reduces=<number>
Starting Job = job_1625156017830_0006, Tracking URL = http://ubuntu:8088/proxy/application_1625156017830_0006/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625156017830_0006
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-01 09:38:37,858 Stage-1 map = 0%,  reduce = 0%
2021-07-01 09:39:09,740 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 7.27 sec
2021-07-01 09:39:18,627 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 9.89 sec
MapReduce Total cumulative CPU time: 9 seconds 890 msec
Ended Job = job_1625156017830_0006
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/account/.hive-staging_hive_2021-07-01_09-38-28_104_7158809991524998
459-1/-ext-10000
Loading data to table bank.account
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 9.89 sec   HDFS Read: 15715 HDFS Write: 347 SUCCESS
Total MapReduce CPU Time Spent: 9 seconds 890 msec
OK
Time taken: 53.643 seconds
hive> select * from acoount;
FAILED: SemanticException [Error 10001]: Line 1:14 Table not found 'acoount'
hive> select * from account;
OK
1001    200     100
1002    201     105
1003    202     102
1004    203     105
1005    204     103
Time taken: 0.414 seconds, Fetched: 5 row(s)
hive> hdoop@ubuntu:~/apache-hive-3.1.2-bin$
```

4.Applying ALTER command for the tables

```
hive> show tables;
OK
account
bank
customer
Time taken: 0.244 seconds, Fetched: 3 row(s)
hive> alter table account rename to accnt;
OK
Time taken: 1.582 seconds
hive> show tables;
OK
accnt
bank
customer
Time taken: 0.067 seconds, Fetched: 3 row(s)
hive> alter table customer add columns(Ph_No int);
OK
Time taken: 0.268 seconds
hive> desc customer;
OK
cust_id                 int
cname                   string
income                  float
accid                   int
dob                     date
ph_no                   int
Time taken: 0.078 seconds, Fetched: 6 row(s)
hive> select * from customer;
OK
200     Adarsh  50000.0 1001    2000-08-03      NULL
201     Ashwini 30000.0 1002    2004-01-02      NULL
202     Asha    45000.0 1003    2000-07-27      NULL
203     Nandan  25000.0 1004    2000-04-23      NULL
204     Anvith  40000.0 1005    2005-05-09      NULL
Time taken: 2.889 seconds, Fetched: 5 row(s)
```

5. Rename the table Account to Accounts.

```
File Edit View Search Terminal Help
hive> show tables;
OK
account
bank
customer
Time taken: 0.244 seconds, Fetched: 3 row(s)
hive> alter table account rename to accnt;
OK
Time taken: 1.582 seconds
hive> show tables;
OK
accnt
bank
customer
Time taken: 0.067 seconds, Fetched: 3 row(s)
hive> alter table customer add columns(Ph_No int);
OK
Time taken: 0.268 seconds
hive> desc customer;
OK
cust_id                 int
cname                   string
income                  float
accid                   int
dob                     date
ph_no                   int
Time taken: 0.078 seconds, Fetched: 6 row(s)
hive> select * from customer;
OK
200     Adarsh  50000.0 1001    2000-08-03      NULL
201     Ashwini 30000.0 1002    2004-01-02      NULL
202     Asha    45000.0 1003    2000-07-27      NULL
203     Nandan  25000.0 1004    2000-04-23      NULL
204     Anvith  40000.0 1005    2005-05-09      NULL
Time taken: 2.889 seconds, Fetched: 5 row(s)
```

6. Rename the column name "blocation" to "location".

```
File Edit View Search Terminal Help
Time taken: 0.023 seconds, Fetched: 4 row(s)
hive> desc bank;
OK
bank_id                 int
bname                   string
blocation               string
Time taken: 0.045 seconds, Fetched: 3 row(s)
hive> select * from bank;
OK
100     Canara  Bangalore
101     BOB     Mysore
102     SBI     Sirsi
103     ICICI   Dharwad
104     HDFC    Hubli
105     Axis    Shivmoga
Time taken: 3.184 seconds, Fetched: 6 row(s)
hive> alter table bank change blocation location string;
OK
Time taken: 0.166 seconds
hive> desc bank;
OK
bank_id                 int
bname                   string
location                string
Time taken: 0.053 seconds, Fetched: 3 row(s)
hive> select * from bank;
OK
100     Canara  Bangalore
101     BOB     Mysore
102     SBI     Sirsi
103     ICICI   Dharwad
104     HDFC    Hubli
105     Axis    Shivmoga
Time taken: 0.325 seconds, Fetched: 6 row(s)
hive>
```

7. Retrieve all the customers who have account in AXIS bank

```
                          hdoop@ubuntu: ~/apache-hive-3.1.2-bin

File Edit View Search Terminal Help
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-02 02:04:50,868 Stage-1 map = 0%,  reduce = 0%
2021-07-02 02:05:53,249 Stage-1 map = 0%,  reduce = 0%
2021-07-02 02:06:06,303 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 86.7 sec
2021-07-02 02:06:20,304 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 93.83 sec
MapReduce Total cumulative CPU time: 1 minutes 33 seconds 830 msec
Ended Job = job_1625216497416_0001
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 93.83 sec   HDFS Read: 14465 HDFS Write: 115 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 33 seconds 830 msec
OK
50000.0 25000.0
Time taken: 183.34 seconds, Fetched: 1 row(s)
hive>  select cust_id,cname from bank b,customer c,accounts a where b.bank_id=a.bank_id and c.cust_id=a.cust_id and bname="Axis";
FAILED: SemanticException Column cust_id Found in more than One Tables/Subqueries
hive> select c.cust_id,c.cname from bank b,customer c,accounts a where b.bank_id=a.bank_id and c.cust_id=a.cust_id and bname="Axis";
No Stats for bank@customer, Columns: cname, cust_id
Query ID = hdoop_20210702020757_71455445-0323-4933-ad88-26a120be8163
Total jobs = 1
Execution completed successfully
MapredLocal task succeeded
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1625216497416_0002, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0002/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0002
Hadoop job information for Stage-5: number of mappers: 1; number of reducers: 0
2021-07-02 02:08:40,628 Stage-5 map = 0%,  reduce = 0%
2021-07-02 02:08:53,469 Stage-5 map = 100%,  reduce = 0%, Cumulative CPU 9.32 sec
MapReduce Total cumulative CPU time: 9 seconds 320 msec
Ended Job = job_1625216497416_0002
MapReduce Jobs Launched:
Stage-Stage-5: Map: 1   Cumulative CPU: 9.32 sec   HDFS Read: 11839 HDFS Write: 134 SUCCESS
Total MapReduce CPU Time Spent: 9 seconds 320 msec
OK
201     Ashwini
203     Nandan
Time taken: 58.776 seconds, Fetched: 2 row(s)
hive>
```

8. Retrieve the customer with maximum income and minimum income

```
                          hdoop@ubuntu: ~/apache-hive-3.1.2-bin

File Edit View Search Terminal Help
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]
Hive Session ID = 47172085-6e06-4156-bd3a-a44fc824c96f

Logging initialized using configuration in jar:file:/home/hdoop/apache-hive-3.1.2-bin/lib/hive-common-3.1.2.jar!/hive-log4j2.properties Async:
 true
Hive Session ID = 6c2baa78-1aae-4010-9fbb-3ed23029832f
Hive-on-MR is deprecated in Hive 2 and may not be available in the future versions. Consider using a different execution engine (i.e. spark, t
ez) or using Hive 1.X releases.
hive> use bank;
OK
Time taken: 1.18 seconds
hive> select max(income),min(income) from customer;
Query ID = hdoop_20210702020318_5c3a7505-e016-4a36-9ee4-95211fc10b24
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625216497416_0001, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0001/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0001
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-02 02:04:50,868 Stage-1 map = 0%,  reduce = 0%
2021-07-02 02:05:53,249 Stage-1 map = 0%,  reduce = 0%
2021-07-02 02:06:06,303 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 86.7 sec
2021-07-02 02:06:20,304 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 93.83 sec
MapReduce Total cumulative CPU time: 1 minutes 33 seconds 830 msec
Ended Job = job_1625216497416_0001
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 93.83 sec   HDFS Read: 14465 HDFS Write: 115 SUCCESS
Total MapReduce CPU Time Spent: 1 minutes 33 seconds 830 msec
OK
50000.0 25000.0
Time taken: 183.34 seconds, Fetched: 1 row(s)
hive>
```

9. Retrieve all the customers who have account

```
hdoop@ubuntu: ~/apache-hive-3.1.2-bin

File  Edit  View  Search  Terminal  Help
Total MapReduce CPU Time Spent: 9 seconds 320 msec
OK
201     Ashwini
203     Nandan
Time taken: 58.776 seconds, Fetched: 2 row(s)
hive> select c.cust_id,c.cname from customer c,accounts a where c.cust_id=a.cust_id;
Query ID = hdoop_20210702021129_b5c56544-8c2d-4a5c-b1e3-37f60b43f0ed
Total jobs = 1

SLF4J: Found binding in [jar:file:/home/hdoop/hadoop-3.2.1/share/hadoop/common/lib/slf4j-log4j12-1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder
.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
2021-07-02 02:11:43     Starting to launch local task to process map join;        maximum memory = 239075328
2021-07-02 02:11:47     Uploaded 1 File to: file:/tmp/hive/java/hdoop/47172085-6e06-4156-bd3a-a44fc824c96f/hive_2021-07-02_02-11-29_438_881590
4101562358295-1/-local-10004/HashTable-Stage-3/MapJoin-mapfile20--.hashtable (394 bytes)2021-07-02 02:11:47        End of local task; Time Taken:
 4.123 sec.
Execution completed successfully
MapredLocal task succeeded
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1625216497416_0003, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0003/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0003
Hadoop job information for Stage-3: number of mappers: 1; number of reducers: 0
2021-07-02 02:12:05,546 Stage-3 map = 0%,  reduce = 0%
2021-07-02 02:12:17,881 Stage-3 map = 100%,  reduce = 0%, Cumulative CPU 12.32 sec
MapReduce Total cumulative CPU time: 12 seconds 320 msec
Ended Job = job_1625216497416_0003
MapReduce Jobs Launched:
Stage-Stage-3: Map: 1   Cumulative CPU: 12.32 sec   HDFS Read: 9354 HDFS Write: 201 SUCCESS
Total MapReduce CPU Time Spent: 12 seconds 320 msec
OK
200     Adarsh
201     Ashwini
202     Asha
203     Nandan
204     Anvith
Time taken: 51.85 seconds, Fetched: 5 row(s)
hive> ▯
```

10. Retrieve all the customers whose income is not more than 20000

```
hdoop@nandan-Aspire-E5-571P: ~

File  Edit  View  Search  Terminal  Help
 insclause-0 has 6 columns, but query has 5 columns.
hive> desc customer;
OK
cust_id                 int
cname                   string
income                  float
accid                   int
dob                     date
ph_no                   int
Time taken: 0.066 seconds, Fetched: 6 row(s)
hive> insert into customer values(205,"Gaurav",15000.00,1006,"2000-11-20",9999998888);
Query ID = hdoop_20210701231119_9150c3fa-7f94-4131-af9f-2bcaf3f6f735
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1625152959941_0012, Tracking URL = http://nandan-Aspire-E5-571P:8088/proxy/application_1625152959941_0012/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625152959941_0012
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2021-07-01 23:11:33,909 Stage-1 map = 0%,  reduce = 0%
2021-07-01 23:11:42,465 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 4.97 sec
MapReduce Total cumulative CPU time: 4 seconds 970 msec
Ended Job = job_1625152959941_0012
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://127.0.0.1:9000/user/hive/warehouse/bank.db/customer/.hive-staging_hive_2021-07-01_23-11-19_721_696251534895049
1616-1/-ext-10000
Loading data to table bank.customer
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1   Cumulative CPU: 4.97 sec   HDFS Read: 6706 HDFS Write: 115 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 970 msec
OK
Time taken: 27.349 seconds
hive> select cust_id,cname from customer where income<20000.00;
OK
205     Gaurav
Time taken: 0.303 seconds, Fetched: 1 row(s)
hive> ▯
```

11. Retrieve all the customers whose dob not between 10-10-1990 and 1-2-1993 group based on cust_id and sort the results in descending order

```
                            hdoop@ubuntu: ~/apache-hive-3.1.2-bin
File  Edit  View  Search  Terminal  Help
205     Gaurav
Time taken: 0.254 seconds, Fetched: 1 row(s)
hive> select cust_id,cname,dob from customer where dob not in ("1990-10-10","1993-2-1")group by cust_id,cname,dob order by cust_id DESC;
Query ID = hdoop_20210702021656_734fed23-8145-473a-82dd-5e395d346364
Total jobs = 2
Launching Job 1 out of 2
Number of reduce tasks not specified. Estimated from input data size: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625216497416_0005, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0005/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0005
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-02 02:17:15,527 Stage-1 map = 0%,  reduce = 0%
2021-07-02 02:17:45,080 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 40.5 sec
2021-07-02 02:17:54,669 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 44.82 sec
MapReduce Total cumulative CPU time: 44 seconds 820 msec
Ended Job = job_1625216497416_0005
Launching Job 2 out of 2
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625216497416_0006, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0006/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0006
Hadoop job information for Stage-2: number of mappers: 1; number of reducers: 1
2021-07-02 02:18:16,672 Stage-2 map = 0%,  reduce = 0%
2021-07-02 02:18:25,187 Stage-2 map = 100%,  reduce = 0%, Cumulative CPU 3.51 sec
2021-07-02 02:18:33,740 Stage-2 map = 100%,  reduce = 100%, Cumulative CPU 8.04 sec
MapReduce Total cumulative CPU time: 8 seconds 40 msec
Ended Job = job_1625216497416_0006
MapReduce Jobs Launched:
```

```
                            hdoop@ubuntu: ~/apache-hive-3.1.2-bin
File  Edit  View  Search  Terminal  Help
  set mapreduce.job.reduces=<number>
Starting Job = job_1625216497416_0005, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0005/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0005
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2021-07-02 02:17:15,527 Stage-1 map = 0%,  reduce = 0%
2021-07-02 02:17:45,080 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 40.5 sec
2021-07-02 02:17:54,669 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 44.82 sec
MapReduce Total cumulative CPU time: 44 seconds 820 msec
Ended Job = job_1625216497416_0005
Launching Job 2 out of 2
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1625216497416_0006, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0006/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0006
Hadoop job information for Stage-2: number of mappers: 1; number of reducers: 1
2021-07-02 02:18:16,672 Stage-2 map = 0%,  reduce = 0%
2021-07-02 02:18:25,187 Stage-2 map = 100%,  reduce = 0%, Cumulative CPU 3.51 sec
2021-07-02 02:18:33,740 Stage-2 map = 100%,  reduce = 100%, Cumulative CPU 8.04 sec
MapReduce Total cumulative CPU time: 8 seconds 40 msec
Ended Job = job_1625216497416_0006
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 44.82 sec   HDFS Read: 13602 HDFS Write: 269 SUCCESS
Stage-Stage-2: Map: 1  Reduce: 1   Cumulative CPU: 8.04 sec   HDFS Read: 8316 HDFS Write: 290 SUCCESS
Total MapReduce CPU Time Spent: 52 seconds 860 msec
OK
205     Gaurav  2000-11-20
204     Anvith  2005-05-09
203     Nandan  2000-04-23
202     Asha    2000-07-27
201     Ashwini 2004-01-02
200     Adarsh  2000-08-03
Time taken: 99.816 seconds, Fetched: 6 row(s)
hive>
```

12. Retrieve view which contains all the fileds from account and cname in it. Demonstrate update operation it


```
hdoop@ubuntu: ~/apache-hive-3.1.2-bin

File  Edit  View  Search  Terminal  Help
OK
205      Gaurav   2000-11-20
204      Anvith   2005-05-09
203      Nandan   2000-04-23
202      Asha     2000-07-27
201      Ashwini  2004-01-02
200      Adarsh   2000-08-03
Time taken: 99.816 seconds, Fetched: 6 row(s)
hive> create view Custaccount as select a.cust_id,a.bank_id,a.accid,cname from accounts a,customer c where c.cust_id=a.cust_id;
FAILED: SemanticException [Error 10002]: Line 1:56 Invalid column reference 'accid'
hive>  create view Custaccount as select a.cust_id,a.bank_id,a.acc_id,cname from accounts a,customer c where c.cust_id=a.cust_id;
OK
Time taken: 0.795 seconds
hive> select * from Custaccount;
Query ID = hdoop_20210702022058_ec0d4a8e-5c81-426f-83ca-3c736fd0bf31
Total jobs = 1
Execution completed successfully
MapredLocal task succeeded
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_1625216497416_0007, Tracking URL = http://ubuntu:8088/proxy/application_1625216497416_0007/
Kill Command = /home/hdoop/hadoop-3.2.1/bin/mapred job  -kill job_1625216497416_0007
Hadoop job information for Stage-3: number of mappers: 1; number of reducers: 0
2021-07-02 02:21:33,527 Stage-3 map = 0%,  reduce = 0%
2021-07-02 02:21:44,985 Stage-3 map = 100%,  reduce = 0%, Cumulative CPU 6.84 sec
MapReduce Total cumulative CPU time: 6 seconds 840 msec
Ended Job = job_1625216497416_0007
MapReduce Jobs Launched:
Stage-Stage-3: Map: 1   Cumulative CPU: 6.84 sec   HDFS Read: 10501 HDFS Write: 246 SUCCESS
Total MapReduce CPU Time Spent: 6 seconds 840 msec
OK
200      100      1001      Adarsh
201      105      1002      Ashwini
202      102      1003      Asha
203      105      1004      Nandan
204      103      1005      Anvith
Time taken: 48.387 seconds, Fetched: 5 row(s)
hive>
```