Data Ingestion from RDS to HDFS using Sqoop
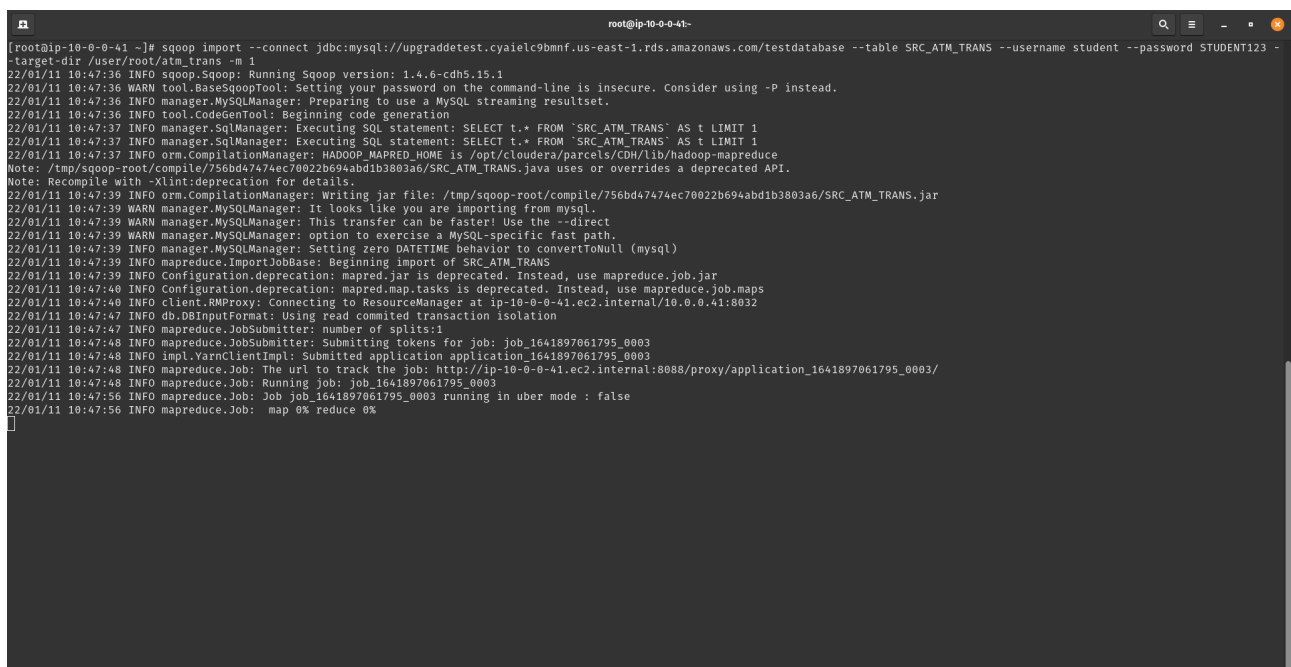
Sqoop Import command used for importing table from RDS to HDFS:

```
sqoop import --connect
jdbc:mysql://upgraddetest.cyaielc9bmnf.us-east-
1.rds.amazonaws.com/testdatabase --table
SRC_ATM_TRANS --username student --password
STUDENT123 --target-dir /user/root/atm_trans -m 1
```

Command used to see the list of imported data in HDFS:

```
hadoop fs -ls /user/root/atm_trans
hadoop fs -cat /user/root/atm_trans/*
```

Screenshot of the imported data:

```
22/01/11 10:47:48 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1641897061795_0003
22/01/11 10:47:48 INFO impl.YarnClientImpl: Submitted application application_1641897061795_0003
22/01/11 10:47:48 INFO mapreduce.Job: The url to track the job: http://ip-10-0-0-41.ec2.internal:8088/proxy/application_1641897061795_0003/
22/01/11 10:47:48 INFO mapreduce.Job: Running job: job_1641897061795_0003
22/01/11 10:47:56 INFO mapreduce.Job: Job job_1641897061795_0003 running in uber mode : false
22/01/11 10:47:56 INFO mapreduce.Job:  map 0% reduce 0%
22/01/11 10:48:28 INFO mapreduce.Job:  map 100% reduce 0%
22/01/11 10:48:28 INFO mapreduce.Job: Job job_1641897061795_0003 completed successfully
22/01/11 10:48:29 INFO mapreduce.Job: Counters: 30
        File System Counters
                FILE: Number of bytes read=0
                FILE: Number of bytes written=176625
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=87
                HDFS: Number of bytes written=531214815
                HDFS: Number of read operations=4
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=2
        Job Counters
                Launched map tasks=1
                Other local map tasks=1
                Total time spent by all maps in occupied slots (ms)=29673
                Total time spent by all reduces in occupied slots (ms)=0
                Total time spent by all map tasks (ms)=29673
                Total vcore-milliseconds taken by all map tasks=29673
                Total megabyte-milliseconds taken by all map tasks=30385152
        Map-Reduce Framework
                Map input records=2468572
                Map output records=2468572
                Input split bytes=87
                Spilled Records=0
                Failed Shuffles=0
                Merged Map outputs=0
                GC time elapsed (ms)=278
                CPU time spent (ms)=29360
                Physical memory (bytes) snapshot=422420480
                Virtual memory (bytes) snapshot=2809896960
                Total committed heap usage (bytes)=387973120
        File Input Format Counters
                Bytes Read=0
        File Output Format Counters
                Bytes Written=531214815
22/01/11 10:48:29 INFO mapreduce.ImportJobBase: Transferred 506.6059 MB in 48.744 seconds (10.3932 MB/sec)
22/01/11 10:48:29 INFO mapreduce.ImportJobBase: Retrieved 2468572 records.
[root@ip-10-0-0-41 ~]#
```

```
[root@ip-10-0-0-41 ~]# hadoop fs -ls /user/root/atm_trans
Found 2 items
-rw-r--r--   3 root supergroup          0 2022-01-11 10:48 /user/root/atm_trans/_SUCCESS
-rw-r--r--   3 root supergroup  531214815 2022-01-11 10:48 /user/root/atm_trans/part-m-00000
[root@ip-10-0-0-41 ~]#
```

2017,January,2,Monday,17,Active,58,NCR,StÃƒÂ¸vring,Baunebakken,4,9530,56.890,9.836,DKK,Visa Dankort,2871,Withdrawal,,,56.885,9.838,2612500,Stovring,272.167,1025,69,2,277,0.000,0,800,Clear,Sk
y is Clear
2017,January,2,Monday,17,Inactive,88,NCR,Storcenter indg. A,Hobrovej,452,9200,57.005,9.876,DKK,Mastercard - on-us,7538,Withdrawal,,,56.972,9.848,2612021,Svenstrup,272.167,1025,69,2,277,0.000
,0,800,Clear,Sky is Clear
2017,January,2,Monday,17,Active,19,NCR,Kolding,Vejlevej,135,6000,55.505,9.457,DKK,VISA,9078,Withdrawal,,,55.490,9.472,2618528,Kolding,274.320,1015,100,3,240,0.000,90,520,Rain,light intensity
 shower rain
2017,January,2,Monday,17,Active,68,NCR,Drive Up Vejle,Havneparken,4,7100,55.707,9.541,DKK,Visa Dankort,2776,Withdrawal,,,55.709,9.536,2610613,Vejle,273.950,1015,99,3,240,0.000,90,520,Rain,l
ight intensity shower rain
2017,January,2,Monday,17,Active,58,NCR,StÃƒÂ¸vring,Baunebakken,4,9530,56.890,9.836,DKK,Visa Dankort,6647,Withdrawal,,,56.885,9.838,2612500,Stovring,272.167,1025,69,2,277,0.000,0,800,Clear,Sk
y is Clear
2017,January,2,Monday,17,Active,9,Diebold Nixdorf,Hadsund,Storegade,12,9560,56.716,10.114,DKK,Visa Dankort,4907,Withdrawal,,,56.715,10.117,2620952,Hadsund,272.167,1025,69,2,277,0.000,0,800,C
lear,Sky is Clear
2017,January,2,Monday,17,Active,26,NCR,HolbÃƒÂ¦k,Slotsvolden,7,4300,55.718,11.704,DKK,Mastercard - on-us,4594,Withdrawal,,,55.700,11.700,2620141,HolbÃƒÂ¦k Kommune,272.150,1014,100,2,260,0.00
0,0,800,Clear,Sky is Clear
2017,January,2,Monday,17,Active,10,NCR,NÃƒÂ¸rresundby,Torvet,6,9400,57.059,9.922,DKK,HÃƒÂ¦vekort - on-us,8250,Withdrawal,,,57.048,9.919,2624886,Aalborg,272.167,1025,69,2,277,0.000,0,800,Clea
r,Sky is Clear
2017,January,2,Monday,17,Active,46,Diebold Nixdorf,HelsingÃƒÂ¸r,Sct. Olai Gade,39,3000,56.036,12.612,DKK,Mastercard - on-us,7465,Withdrawal,,,56.036,12.614,2620473,Helsingor,271.840,1012,79,
5,289,0.000,20,801,Clouds,few clouds
2017,January,2,Monday,17,Active,48,Diebold Nixdorf,BrÃƒÂ¸nderslev,Algade,4,9700,57.269,9.945,DKK,Visa Dankort - on-us,2577,Withdrawal,,,57.118,9.857,2610823,Vadum,272.167,1025,69,2,277,0.000
,0,800,Clear,Sky is Clear
2017,January,2,Monday,17,Inactive,81,NCR,Spar KÃƒÂ¸bmand TornhÃƒÂ¸j,TornhÃƒÂ¸jvej,4,9220,57.026,10.002,DKK,MasterCard,490,Withdrawal,,,56.994,9.991,2621449,Gistrup,272.167,1025,69,2,277,0.00
0,0,800,Clear,Sky is Clear
2017,January,2,Monday,17,Active,11,NCR,Sauersvej,Fridtjof Nansens Vej,2,9210,57.023,9.940,DKK,VISA,4719,Withdrawal,,,57.048,9.935,2616235,NÃƒÂ¸rresundby,272.167,1025,69,2,277,0.000,0,800,Cle
ar,Sky is Clear
2017,January,2,Monday,17,Active,33,NCR,Vadum,Ellehammersvej,43,9430,57.118,9.861,DKK,Visa Dankort - on-us,2125,Withdrawal,,,57.118,9.857,2610823,Vadum,272.167,1025,69,2,277,0.000,0,800,Clear
,Sky is Clear
2017,January,2,Monday,17,Active,28,NCR,LÃƒÂ¸gstÃƒÂ¸r,ÃƒÂ¸sterbrogade,8,9670,56.967,9.253,DKK,Visa Dankort - on-us,6467,Withdrawal,,,56.962,9.258,2617467,Logstor,272.167,1025,69,2,277,0.000,0
,800,Clear,Sky is Clear
2017,January,2,Monday,17,Inactive,16,NCR,Skive,Adelgade,8,7800,56.567,9.027,DKK,HÃƒÂ¦vekort - on-us,5962,Withdrawal,,,56.567,9.033,2613731,Skive,274.150,1014,100,3,240,0.000,32,520,Rain,ligh
t intensity shower rain
2017,January,2,Monday,17,Active,17,NCR,Randers,ÃƒÂ¸stervold,16,8900,56.462,10.038,DKK,Visa Dankort,406,Withdrawal,,,56.715,10.117,2620952,Hadsund,272.167,1025,69,2,277,0.000,0,800,Clear,Sky
is Clear
2017,January,2,Monday,17,Active,20,NCR,Bispensgade,Bispensgade,35,9800,57.453,9.996,DKK,Dankort - on-us,4147,Withdrawal,,,57.464,9.982,2620214,Hjorring,274.917,1025,100,3,298,0.000,0,800,Cle
ar,Sky is Clear
2017,January,2,Monday,17,Active,42,NCR,Vinderup,SÃƒÂ¸ndergade,5,7830,56.481,8.779,DKK,Visa Dankort - on-us,9517,Withdrawal,,,56.475,8.791,2610196,Vinderup,272.167,1025,69,2,277,0.000,0,800,C
lear,Sky is Clear
2017,January,2,Monday,17,Active,46,Diebold Nixdorf,HelsingÃƒÂ¸r,Sct. Olai Gade,39,3000,56.036,12.612,DKK,Mastercard - on-us,5145,Withdrawal,,,56.036,12.614,2620473,Helsingor,271.840,1012,79,
5,289,0.000,20,801,Clouds,few clouds
2017,January,2,Monday,17,Active,84,NCR,Svendborg,Sankt Nicolai Gade,1,5700,55.058,10.609,DKK,Mastercard - on-us,7173,Withdrawal,,,55.060,10.607,2612045,Svendborg,274.400,1015,100,4,260,0.000
,0,800,Clear,Sky is Clear
2017,January,2,Monday,17,Active,37,NCR,Silkeborg,Borgergade,36,8600,56.179,9.552,DKK,VISA,428,Withdrawal,,,56.170,9.545,2614030,Silkeborg,273.090,1014,100,3,240,0.000,0,520,Rain,light intens
ity shower rain
2017,January,2,Monday,17,Active,67,NCR,HÃƒÂ¸jslev,ÃƒÂ¸sterrisvej,2,7840,56.551,9.110,DKK,Visa Dankort,624,Withdrawal,,,56.586,9.136,2619908,Hojslev,272.167,1025,69,2,277,0.000,0,800,Clear,Sk
y is Clear
2017,January,2,Monday,17,Active,15,NCR,Vestre,Kastetvej,36,9000,57cat: Filesystem closed
[root@ip-10-0-0-41 ~]# ^C
[root@ip-10-0-0-41 ~]#