Data Ingestion from the RDS to HDFS using Sqoop

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

NOTE: If its mapped to hadoop directory, then run "Sudo -i" command first to point to root and then run below command to import data

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/etl_project_src_atm_trans_new \
-m 1

```
[root@ip-10-0-4-133 ~]# 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/etl_project_src_atm_trans_new \
> -m 1
```

Command used to see the list of imported data in HDFS:
hadoop fs -ls /user/root/etl_project_src_atm_trans_new

```
[root@ip-10-0-4-133 ~]# hadoop fs -ls /user/root/etl_project_src_atm_trans_new
Found 2 items
-rw-r--r--   1 root hdfsadmingroup          0 2022-08-08 17:43 /user/root/etl_project_src_atm_trans_new/_SUCCESS
-rw-r--r--   1 root hdfsadmingroup  531214815 2022-08-08 17:43 /user/root/etl_project_src_atm_trans_new/part-m-00000
[root@ip-10-0-4-133 ~]#
```

Screenshot of the imported data:

```
agen,277.340,994,100,8,160,0.000,75,301,Drizzle,drizzle
2017,December,31,Sunday,14,Active,69,NCR,Taars,Bredgade,91,9830,57.385,10.116,DKK,Visa Dankort - on-us,1914,Withdrawal,,,57.383,10.117,2611852,Tars,277.794,9
99,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,19,NCR,Kolding,Vejlevej,135,6000,55.505,9.457,DKK,MasterCard,2065,Withdrawal,,,55.490,9.472,2618528,Kolding,281.410,990,100
,7,230,0.000,92,300,Drizzle,light intensity drizzle
2017,December,31,Sunday,14,Inactive,74,NCR,Jebjerg,Kirkegade,4,7870,56.671,9.013,DKK,Mastercard - on-us,4584,Withdrawal,,,56.567,9.033,2613731,Skive,279.150,
988,93,5,170,0.000,90,500,Rain,light rain
2017,December,31,Sunday,14,Active,15,NCR,Vestre,Kastetvej,36,9000,57.053,9.905,DKK,Mastercard - on-us,6725,Withdrawal,,,57.048,9.919,2624886,Aalborg,277.794,
999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,10,NCR,NÃƒÂ,rresundby,Torvet,6,9400,57.059,9.922,DKK,HÃƒÂ¦vekort - on-us,9875,Withdrawal,,,57.048,9.919,2624886,Aalborg,277
.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,23,Diebold Nixdorf,Vodskov,Vodskovvej,27,9310,57.104,10.027,DKK,Visa Dankort - on-us,9197,Withdrawal,,,57.109,10.022,261009
5,Vodskov,277.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,19,NCR,Kolding,Vejlevej,135,6000,55.505,9.457,DKK,Visa Dankort,6363,Withdrawal,,,55.490,9.472,2618528,Kolding,281.410,990,1
00,7,230,0.000,92,300,Drizzle,light intensity drizzle
2017,December,31,Sunday,14,Active,69,NCR,Taars,Bredgade,91,9830,57.385,10.116,DKK,Visa Dankort - on-us,4223,Withdrawal,,,57.383,10.117,2611852,Tars,277.794,9
99,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,60,NCR,Hirtshals,JÃƒÂ,rgen Fibigersgade,4,9850,57.591,9.957,DKK,Visa Dankort - on-us,2025,Withdrawal,,,57.588,9.959,2620279
,Hirtshals,277.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,83,NCR,Fur,StenÃƒÂ,re,19,7884,56.805,9.020,DKK,Visa Dankort - on-us,7456,Withdrawal,,,56.793,8.853,2615964,Nykobing Mors,27
9.150,988,93,5,170,0.000,90,500,Rain,light rain
2017,December,31,Sunday,14,Active,17,NCR,Randers,ÃƒÂˆstervold,16,8900,56.462,10.038,DKK,Mastercard - on-us,1207,Withdrawal,,,56.715,10.117,2620952,Hadsund,27
7.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,47,NCR,Frederiksberg,Gammel Kongevej,157,1850,55.677,12.537,DKK,Visa Dankort,3668,Withdrawal,,,55.679,12.535,2621942,Freder
iksberg,277.630,994,100,8,160,0.000,75,500,Rain,light rain
2017,December,31,Sunday,14,Active,103,Diebold Nixdorf,Vejgaard,Hadsundvej,20,9000,57.043,9.950,DKK,Mastercard - on-us,4717,Withdrawal,,,57.048,9.935,2616235,
NÃƒÂ,rresundby,277.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,19,NCR,Kolding,Vejlevej,135,6000,55.505,9.457,DKK,Visa Dankort,2582,Withdrawal,,,55.490,9.472,2618528,Kolding,281.410,990,1
00,7,230,0.000,92,300,Drizzle,light intensity drizzle
2017,December,31,Sunday,14,Active,4,NCR,Svogerslev,BrÃƒÂ,nsager,1,4000,55.634,12.018,DKK,Visa Dankort,8760,Withdrawal,,,55.642,12.080,2614481,Roskilde,278.15
0,993,100,7,150,0.000,75,500,Rain,light rain
2017,December,31,Sunday,14,Active,110,Diebold Nixdorf,HolbÃƒÂ¦k,Slotsvolden,7,4300,55.718,11.704,DKK,Visa Dankort - on-us,6055,Withdrawal,,,55.700,11.700,262
0141,HolbÃƒÂ¦k Kommune,277.800,994,100,8,160,0.000,75,500,Rain,light rain
2017,December,31,Sunday,14,Active,6,NCR,Fredericia,SjÃƒÂ¦llandsgade,33,7000,55.564,9.757,DKK,Mastercard - on-us,3993,Withdrawal,,,55.566,9.753,2621951,Freder
icia,281.160,990,100,7,230,0.000,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,40,Diebold Nixdorf,Frederikshavn,Danmarksgade,48,9900,57.441,10.537,DKK,Visa Dankort - on-us,1801,Withdrawal,,,57.441,10.53
7,2621927,Frederikshavn,277.094,1001,100,13,157,4.069,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,28,NCR,LÃƒÂ,gstÃƒÂ,r,ÃƒÂˆsterbrogade,8,9670,56.967,9.253,DKK,Visa Dankort,7028,Withdrawal,,,56.962,9.258,2617467,Logstor,27
7.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,60,NCR,Hirtshals,JÃƒÂ,rgen Fibigersgade,4,9850,57.591,9.957,DKK,Mastercard - on-us,9733,Withdrawal,,,57.588,9.959,2620279,H
irtshals,277.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,11,NCR,Sauersvej,Fridtjof Nansens Vej,2,9210,57.023,9.940,DKK,MasterCard,7584,Withdrawal,,,57.048,9.935,2616235,NÃƒÂ,rresun
dby,277.794,999,90,9,172,4.336,92,501,Rain,moderate rain
2017,December,31,Sunday,14,Active,17,NCR,Randers,ÃƒÂˆstervold,16,8900,56.462,10.038,DKK,Visa Dankort - on-us,8719,Withdrawal,,,56.715,10.117,2620952,Hadsund,
```

Note : I have downloaded the mysql connector to connect to mysql jdbc before all the steps mentioned above.

wget https://de-mysql-connector.s3.amazonaws.com/mysql-connector-java-8.0.25.tar.gz

```
[hadoop@ip-10-0-4-13 ~]$ wget https://de-mysql-connector.s3.amazonaws.com/mysql-connector-java-8.0.25.tar.gz
--2022-08-08 15:51:52--  https://de-mysql-connector.s3.amazonaws.com/mysql-connector-java-8.0.25.tar.gz
Resolving de-mysql-connector.s3.amazonaws.com (de-mysql-connector.s3.amazonaws.com)... 3.5.9.127
Connecting to de-mysql-connector.s3.amazonaws.com (de-mysql-connector.s3.amazonaws.com)|3.5.9.127|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4079310 (3.9M) [application/x-gzip]
Saving to: 'mysql-connector-java-8.0.25.tar.gz'

100%[==================================================================================================>] 4,079,310   --.-K/s   in 0.1s
```

tar -xvf mysql-connector-java-8.0.25.tar.gz

```
[hadoop@ip-10-0-4-13 ~]$ ls
mysql-connector-java-8.0.25.tar.gz
[hadoop@ip-10-0-4-13 ~]$ tar mysql-connector-java-8.0.25.tar.gz
tar: Old option `g' requires an argument.
Try `tar --help' or `tar --usage' for more information.
[hadoop@ip-10-0-4-13 ~]$ tar -xvf mysql-connector-java-8.0.25.tar.gz
```

cd mysql-connector-java-8.0.25/
sudo cp mysql-connector-java-8.0.25.jar /usr/lib/sqoop/lib/

```
[hadoop@ip-10-0-4-13 ~]$ cd mysql-connector-java-8.0.25/
[hadoop@ip-10-0-4-13 mysql-connector-java-8.0.25]$ sudo cp mysql-connector-java-8.0.25.jar /usr/lib/sqoop/lib/
[hadoop@ip-10-0-4-13 mysql-connector-java-8.0.25]$ sudo -i
```