

```

[hadoop@ip-172-31-0-181 ~]$ wget https://de-mysql-connector.s3.amazonaws.com/mysql-connector-java-8.0.25.tar.gz
--2023-01-27 02:03:56-- 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) ... 52.216.168.35, 52.216.222.161, 52.217.10.116, ...
Connecting to de-mysql-connector.s3.amazonaws.com (de-mysql-connector.s3.amazonaws.com)|52.216.168.35|: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    17.7MB/s    in 0.2s

2023-01-27 02:03:56 (17.7 MB/s) - 'mysql-connector-java-8.0.25.tar.gz' saved [4079310/4079310]

[hadoop@ip-172-31-0-181 ~]$ tar -xvf mysql-connector-java-8.0.25.tar.gz
mysql-connector-java-8.0.25/
mysql-connector-java-8.0.25/src/
mysql-connector-java-8.0.25/src/build/
mysql-connector-java-8.0.25/src/build/java/
mysql-connector-java-8.0.25/src/build/java/documentation/
mysql-connector-java-8.0.25/src/build/java/instrumentation/
mysql-connector-java-8.0.25/src/build/misc/

```

In first step we create a EMR cluster and connect it with putty/terminal. After that we need a connector to import our data from another source to our cluster with the help of Sqoop. As we can see in the picture I have downloaded and unzipped a mysql-connector.

Source to download that connector:- <https://de-mysql-connector.s3.amazonaws.com/mysql-connector-java-8.0.25.tar.gz>

```
[hadoop@ip-172-31-0-181 ~]$ cd mysql-connector-java-8.0.25/
[hadoop@ip-172-31-0-181 mysql-connector-java-8.0.25]$ sudo cp mysql-connector-java-8.0.25.jar /usr/lib/sqoop/lib/
[hadoop@ip-172-31-0-181 mysql-connector-java-8.0.25]$ cd /hadoop/
-bash: cd: /hadoop/: No such file or directory
[hadoop@ip-172-31-0-181 mysql-connector-java-8.0.25]$ cd ~
[hadoop@ip-172-31-0-181 ~]$
```

In above picture we can see that I am coping that connector jar file to my sqoop library that it can work smoothly. Now in below picture we are running the code to import the from one database to our EMR cluster.

Code:-

```
sqoop import \  
--connect jdbc:mysql://upgraddetest.cyaiehc9bmnf.us-east-1.rds.amazonaws.com/testdatabase \  
--table SRC_ATM_TRANS \  
--username student --password STUDENT123 \  
--target-dir /user/root/Dump_ATM \  
-m 1
```

```
[hadoop@ip-172-31-0-181 ~]$ sqoop import \  
> --connect jdbc:mysql://upgraddetest.cyaiehc9bmnf.us-east-1.rds.amazonaws.com/testdatabase \  
> --table SRC_ATM_TRANS \  
> --username student --password STUDENT123 \  
> --target-dir /user/root/Dump_ATM \  
> -m 1
```

After processing the code our MapReduce job will get triggered. And it will take some to complete depends upon the size of the file we are importing.

```
23/01/27 02:14:39 INFO mapreduce.Job: map 0% reduce 0%
23/01/27 02:15:12 INFO mapreduce.Job: map 100% reduce 0%
23/01/27 02:15:12 INFO mapreduce.Job: Job job_1674784716462_0001 completed successfully
23/01/27 02:15:13 INFO mapreduce.Job: Counters: 30
```

```
23/01/27 02:15:13 INFO mapreduce.ImportJobBase: Transferred 506.6059 MB in 47.7502 seconds (10.6095 MB/sec)
23/01/27 02:15:13 INFO mapreduce.ImportJobBase: Retrieved 2468572 records.
```

Once the MapReduce job completes we can see the success message with the number of records retrieved.

In this case it is:- 2468572

If we want to check our retrieved file in the cluster then we have to write the code `Hadoop fs -ls /user/root/Dump_ATM.`

Note:- Inplace of Dump_ATM you have to give your file name.

```
[hadoop@ip-172-31-58-85 ~]$ hadoop fs -ls /user/root/Dump_ATM
Found 2 items
-rw-r--r--  1 hadoop hadoop          0 2023-01-30 13:01 /user/root/Dump_ATM/_SUCCESS
-rw-r--r--  1 hadoop hadoop 531214815 2023-01-30 13:01 /user/root/Dump_ATM/part-m-00000
[hadoop@ip-172-31-58-85 ~]$
```



```

2017,December,31,Sunday,23,Active,64,NCR,Horsens,GrÃfÃnlandsvej,5,8700,55.859,9.854,DKK,Visa Dankort,8690,Withdrawal,,,55.861,9.850,2619771,Horsens,279.900,989,100,4,2
00,0.138,92,500,Rain,light rain
2017,December,31,Sunday,23,Active,24,NCR,Hobro,Adelgade,31,9500,56.638,9.794,DKK,Mastercard - on-us,7780,Withdrawal,,,56.643,9.790,2620167,Hobro,277.589,999,87,6,208,0.
000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,20,NCR,Bispensgade,Bispensgade,35,9800,57.453,9.996,DKK,Mastercard - on-us,2830,Withdrawal,,,57.464,9.982,2620214,Hjorring,278.589,998
,99,8,210,0.000,44,802,Clouds,scattered clouds
2017,December,31,Sunday,23,Active,28,NCR,LÃfÃgstÃfÃr,ÃfÃsterbrogade,8,9670,56.967,9.253,DKK,VISA,812,Withdrawal,,,56.962,9.258,2617467,Logstor,277.589,999,87,6,208,0
.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,28,NCR,LÃfÃgstÃfÃr,ÃfÃsterbrogade,8,9670,56.967,9.253,DKK,VISA,5568,Withdrawal,,,56.962,9.258,2617467,Logstor,277.589,999,87,6,208
0.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,49,NCR,Bindslev,NÃfÃrrebro,18,9881,57.541,10.200,DKK,MasterCard,5403,Withdrawal,,,57.471,10.203,2614010,Sindal,277.589,999,87,6,208,0
.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,49,NCR,Bindslev,NÃfÃrrebro,18,9881,57.541,10.200,DKK,MasterCard,312,Withdrawal,,,57.471,10.203,2614010,Sindal,277.589,999,87,6,208,0.
000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,56,Diebold Nixdorf,KÃfÃge,SÃfÃndre Alle,1,4600,55.454,12.181,DKK,Visa Dankort - on-us,5351,Withdrawal,,,55.588,12.251,2621218,Greve
Kommune,280.150,992,100,3,190,0.000,90,804,Clouds,overcast clouds
2017,December,31,Sunday,23,Active,103,Diebold Nixdorf,Vejgaard,Hadsundvej,20,9000,57.043,9.950,DKK,Mastercard - on-us,5821,Withdrawal,,,57.048,9.935,2616235,NÃfÃrresun
dby,277.589,999,87,6,208,0.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,1,NCR,NÃfÃstved,Farimagsvej,8,4700,55.233,11.763,DKK,Visa Dankort,3049,Withdrawal,,,55.230,11.761,2616038,Naestved,280.150,991,100,5,
210,1.175,92,500,Rain,light rain
2017,December,31,Sunday,23,Active,85,Diebold Nixdorf,KÃfÃbenhavn,Regnbuepladsen,5,1550,55.676,12.571,DKK,MasterCard,7785,Withdrawal,,,55.676,12.566,2618425,Copenhagen,
280.150,992,100,3,190,0.000,90,804,Clouds,overcast clouds
2017,December,31,Sunday,23,Active,15,NCR,Vestre,Kastetvej,36,9000,57.053,9.905,DKK,Mastercard - on-us,9777,Withdrawal,,,57.048,9.919,2624886,Aalborg,277.589,999,87,6,20
8,0.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,15,NCR,Vestre,Kastetvej,36,9000,57.053,9.905,DKK,MasterCard,5531,Withdrawal,,,57.048,9.919,2624886,Aalborg,277.589,999,87,6,208,0.000,
76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,34,NCR,Skipperen,Vestre Alle,2,9000,57.034,9.908,DKK,MasterCard,8323,Withdrawal,,,57.048,9.919,2624886,Aalborg,277.589,999,87,6,208,0
000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,20,NCR,Bispensgade,Bispensgade,35,9800,57.453,9.996,DKK,MasterCard,5023,Withdrawal,,,57.464,9.982,2620214,Hjorring,278.589,998,99,8,21
0,0.000,44,802,Clouds,scattered clouds
2017,December,31,Sunday,23,Active,34,NCR,Skipperen,Vestre Alle,2,9000,57.034,9.908,DKK,MasterCard,147,Withdrawal,,,57.048,9.919,2624886,Aalborg,277.589,999,87,6,208,0.0
00,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,70,Diebold Nixdorf,Holstebro,Hostrupsvej,6,7500,56.373,8.625,DKK,MasterCard,5666,Withdrawal,,,56.360,8.616,2620046,Holstebro,280.150,9
88,93,4,210,0.000,92,804,Clouds,overcast clouds
2017,December,31,Sunday,23,Active,49,NCR,Bindslev,NÃfÃrrebro,18,9881,57.541,10.200,DKK,MasterCard,7886,Withdrawal,,,57.471,10.203,2614010,Sindal,277.589,999,87,6,208,0
.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Inactive,12,NCR,ÃfÃsterÃfÃ Duus,ÃfÃsterÃfÃ Duus,12,9000,57.049,9.922,DKK,Mastercard - on-us,2436,Withdrawal,,,57.048,9.919,2624886,Aalborg,27
7.589,999,87,6,208,0.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Inactive,12,NCR,ÃfÃsterÃfÃ Duus,ÃfÃsterÃfÃ Duus,12,9000,57.049,9.922,DKK,Mastercard - on-us,8519,Withdrawal,,,57.048,9.919,2624886,Aalborg,27
7.589,999,87,6,208,0.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,10,NCR,NÃfÃrresundby,Torvet,6,9400,57.059,9.922,DKK,Mastercard - on-us,5286,Withdrawal,,,57.048,9.919,2624886,Aalborg,277.589,999,87,
6,208,0.000,76,803,Clouds,broken clouds
2017,December,31,Sunday,23,Active,37,NCR,Silkeborg,Borgergade,36,8600,56.179,9.552,DKK,VISA,876,Withdrawal,,,56.170,9.545,2614030,Silkeborg,279.800,988,93,4,210,0.000,8
8,804,Clouds,overcast clouds

```

At last if we want to check the data of the file then we do that with below mentioned code:-

```
hadoop fs -cat /user/root/Dump_ATM/part-m-00000
```

Data Ingestion Completed with help of Sqoop from one database to EMR cluster