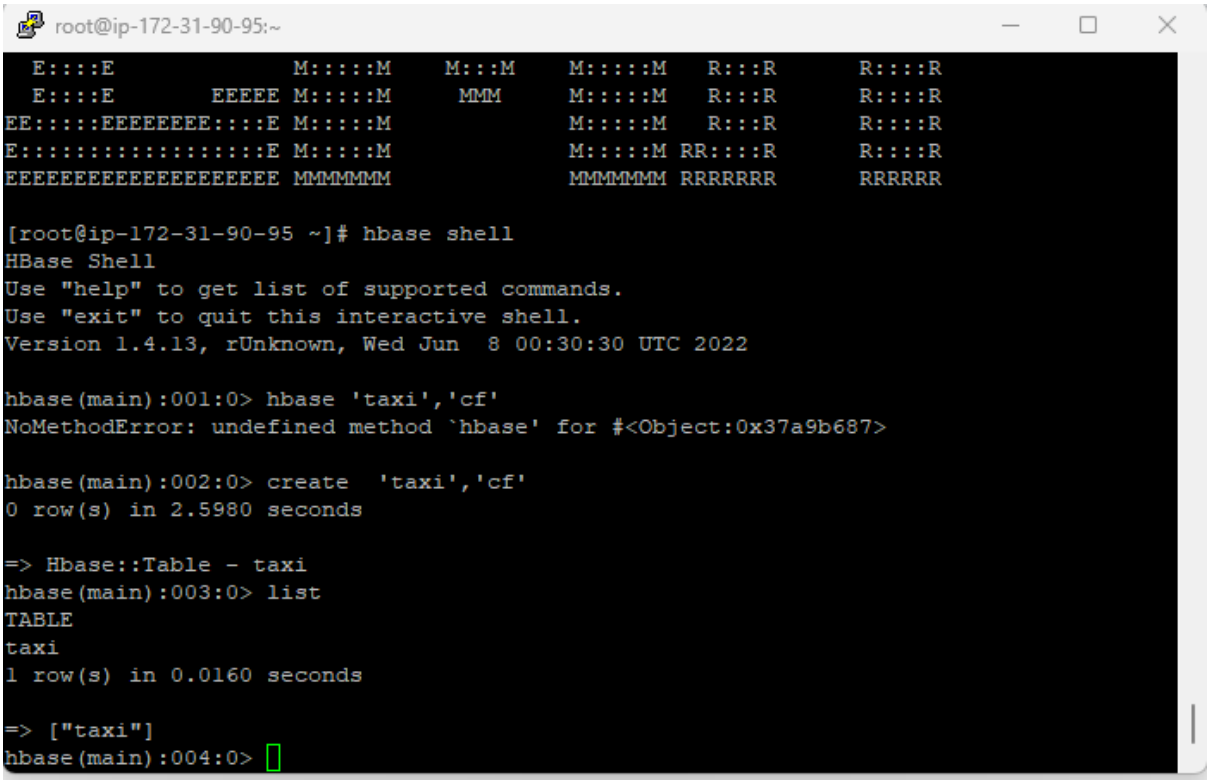
Ingestion Task

- **Command for running sudo**
  sudo – i

- **Command for entering inside hbase**
  hbase shell

- **Command for creating hbase table**
  create ' taxi ', ' cf '

- **Command for listing all tables**
  list



- **Command for installing mysql on EMR cluster**

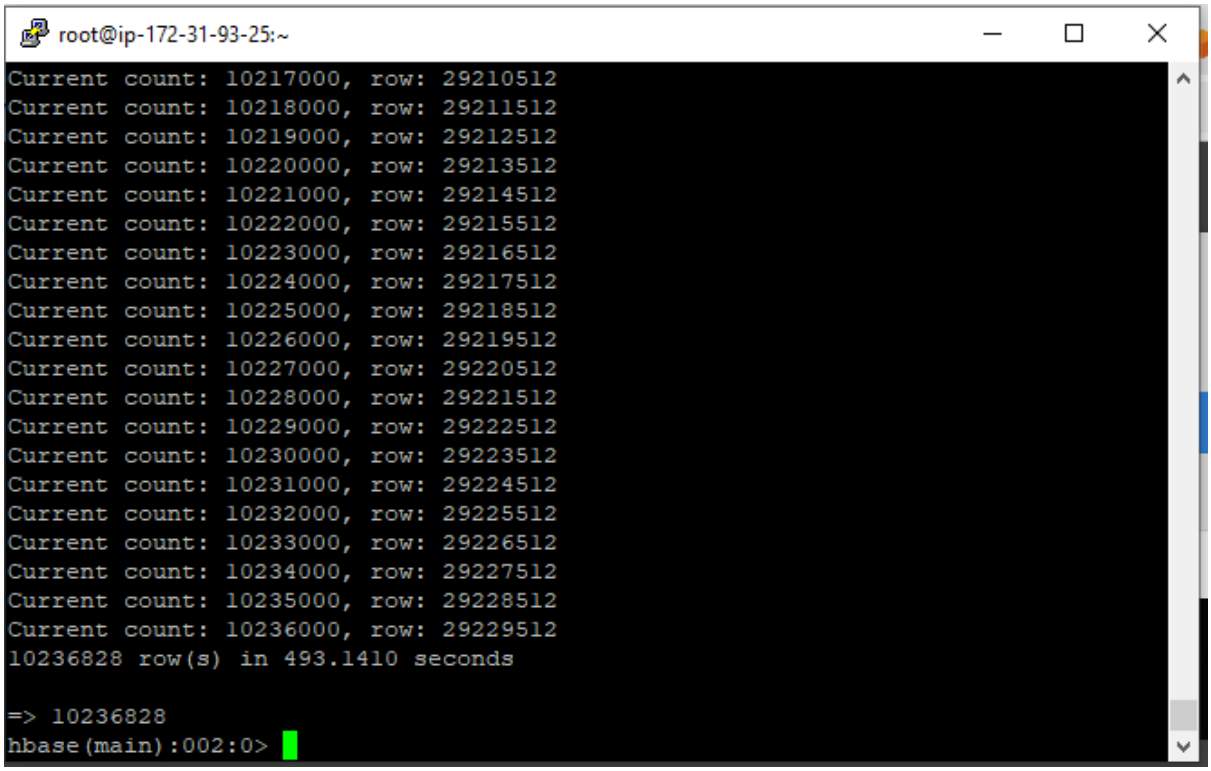
wget https://de-mysql-connector.s3.amazonaws.com/mysql-connector-java-8.0.25.tar.gz

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

cd mysql-connector-java-8.0.25

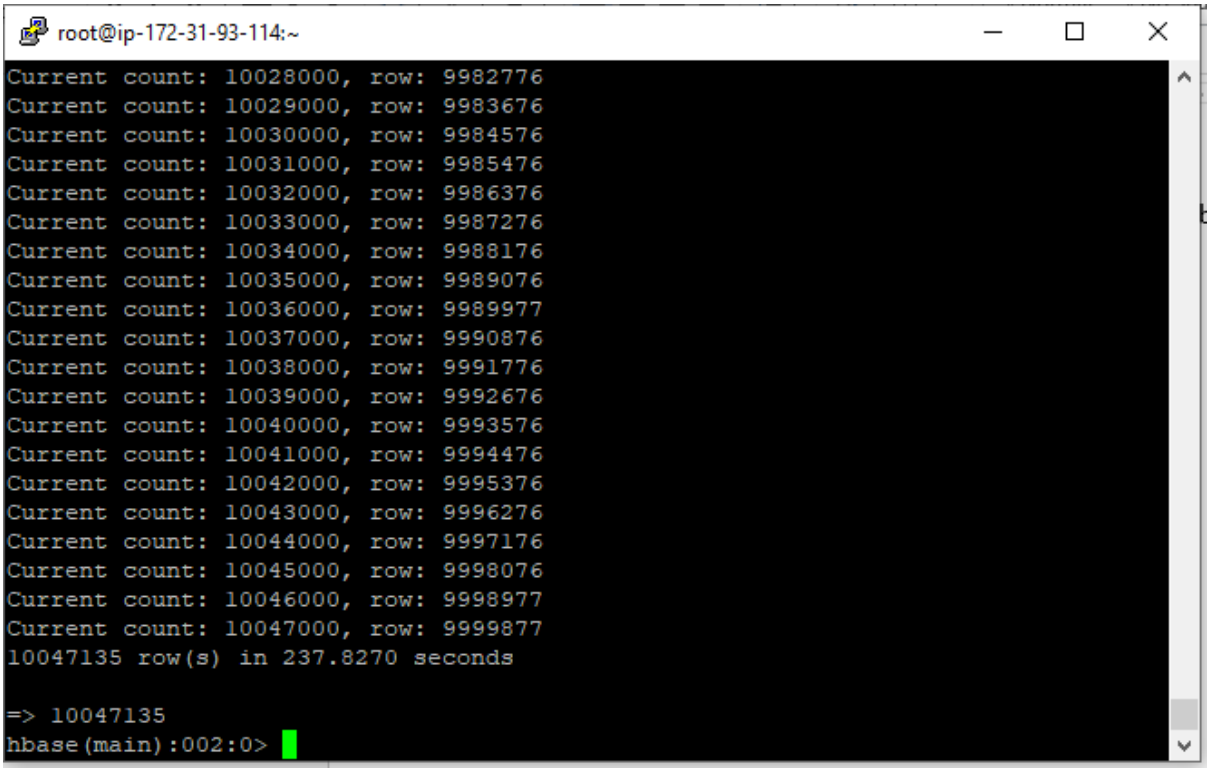
sudo cp mysql-connector-java-8.0.25.jar /usr/lib/sqoop/lib/

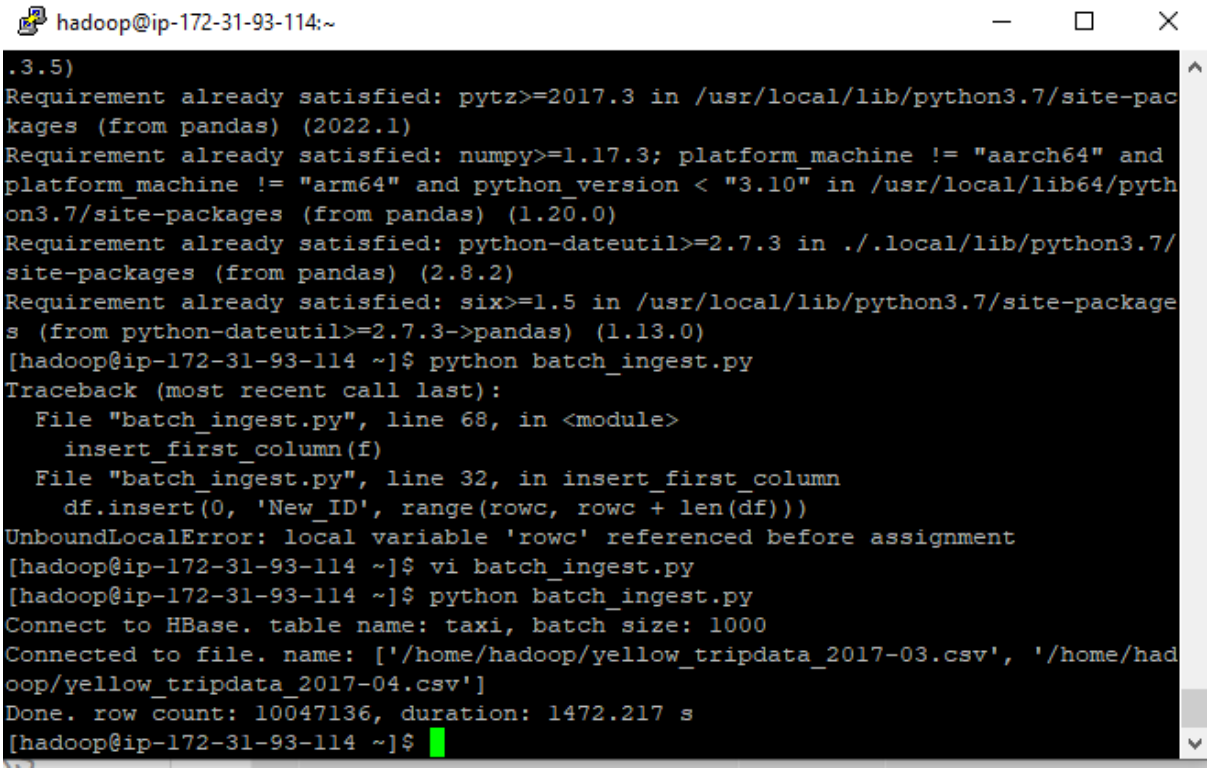
- **Command for importing table contents from RDS mysql to Hbase table**
  sqoop import --connect jdbc:mysql://upgradassignmentdb.cdwr877prmiq.us-east-1.rds.amazonaws.com:3306/mapreduce1 --username admin --password admin123 --table Taxi --hbase-table taxi --column-family cf --hbase-row-key Trip_no -m 1



- **Installing happybase**
  sudo yum install python3-devel
  pip install happybase

- **Running batch_ingest.py**
  python batch_ingest.py
- **Count after batch wise insertion of data to taxi table in hbase**
  count ‘taxi’


root@ip-172-31-93-114:~
Current count: 10028000, row: 9982776
Current count: 10029000, row: 9983676
Current count: 10030000, row: 9984576
Current count: 10031000, row: 9985476
Current count: 10032000, row: 9986376
Current count: 10033000, row: 9987276
Current count: 10034000, row: 9988176
Current count: 10035000, row: 9989076
Current count: 10036000, row: 9989977
Current count: 10037000, row: 9990876
Current count: 10038000, row: 9991776
Current count: 10039000, row: 9992676
Current count: 10040000, row: 9993576
Current count: 10041000, row: 9994476
Current count: 10042000, row: 9995376
Current count: 10043000, row: 9996276
Current count: 10044000, row: 9997176
Current count: 10045000, row: 9998076
Current count: 10046000, row: 9998977
Current count: 10047000, row: 9999877
10047135 row(s) in 237.8270 seconds
=> 10047135
hbase(main):002:0>


hadoop@ip-172-31-93-114:~
.3.5)
Requirement already satisfied: pytz>=2017.3 in /usr/local/lib/python3.7/site-pac
kages (from pandas) (2022.1)
Requirement already satisfied: numpy>=1.17.3; platform_machine != "aarch64" and
platform_machine != "arm64" and python_version < "3.10" in /usr/local/lib64/pyth
on3.7/site-packages (from pandas) (1.20.0)
Requirement already satisfied: python-dateutil>=2.7.3 in ./.local/lib/python3.7/
site-packages (from pandas) (2.8.2)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.7/site-package
s (from python-dateutil>=2.7.3->pandas) (1.13.0)
[hadoop@ip-172-31-93-114 ~]$ python batch_ingest.py
Traceback (most recent call last):
File "batch_ingest.py", line 68, in <module>
insert_first_column(f)
File "batch_ingest.py", line 32, in insert_first_column
df.insert(0, 'New_ID', range(rowc, rowc + len(df)))
UnboundLocalError: local variable 'rowc' referenced before assignment
[hadoop@ip-172-31-93-114 ~]$ vi batch_ingest.py
[hadoop@ip-172-31-93-114 ~]$ python batch_ingest.py
Connect to HBase. table name: taxi, batch size: 1000
Connected to file. name: ['/home/hadoop/yellow_tripdata_2017-03.csv', '/home/had
oop/yellow_tripdata_2017-04.csv']
Done. row count: 10047136, duration: 1472.217 s
[hadoop@ip-172-31-93-114 ~]$