

1. Log into your EMR instance using hadoop, then switch to root using `sudo -i` and complete the setup. Install the MySQL connector jar file.

```
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/
```

2. Ingest data from MySQL RDS to HBase table:

```
sqoop import \  
--connect jdbc:mysql:// database-1.c4b5zbadctl.us-  
east1.rds.amazonaws.com/taxi_records\  
--username admin --password 12345678 \  
--table trip_log \  
--hbase-table trip_log_hbase \  
--column-family cf1 \  
--hbase-create-table \  
--hbase-row-key tpep_pickup_datetime,tpep_dropoff_datetime \  
--hbase-bulkload \  
--split-by payment_type
```

command explanation:

This is a `sqoop` command that imports data from a MySQL database table `trip_log` into an HBase table `trip_log_hbase`. Here is what each option in the command does:

- `--connect`: specifies the JDBC connection string for the MySQL database.
- `--username`: specifies the username to use when connecting to the MySQL database.
- `--password`: specifies the password to use when connecting to the MySQL database.
- `--table`: specifies the name of the MySQL table to import data from.

- `--hbase-table`: specifies the name of the HBase table to import data into.
- `--column-family`: specifies the name of the column family in HBase where the imported data will be stored.
- `--hbase-create-table`: creates an HBase table if it does not exist.
- `--hbase-row-key`: specifies one or more columns from the MySQL table that will be used as the row key in HBase.
- `--hbase-bulkload`: uses HBase bulk load feature for faster data loading.
- `--split-by`: specifies a column from the MySQL table that will be used to split data into multiple HBase regions.

In this command, data is imported from the MySQL table `trip_log` into an HBase table named `trip_log_hbase`. The column family in HBase where the imported data will be stored is named `cf1`. The row key in HBase is composed of two columns from the MySQL table: `tpep_pickup_datetime` and `tpep_dropoff_datetime`. The data is loaded into HBase using bulk load feature for faster loading. The data is split into multiple regions based on the column `payment_type`. Let me know if you have any other questions.