

Exercise Error: Querying Streaming-Data Table

When I run the SQL SELECT query I get the error below.

The screenshot shows a Databricks workspace interface. On the left, the Explorer sidebar displays a tree structure of data items under 'OneLake' and 'El_Lakehouse'. In the main area, two code boxes are visible. Code box [27] contains Python code for writing a stream to a delta table:

```
1 # Write the stream to a delta table
2 delta_stream_table_path = 'Tables/iotdevicedata'
3 checkpointpath = 'Files/delta/checkpoint'
4 deltaStream = iotstream.writeStream.format("delta").option("checkpointLocation", checkpointpath).start(delta_stream_table_path)
5 print("Streaming to delta sink...")
```

Code box [28] contains a failed SQL SELECT statement:

```
1 %%sql
2 SELECT * FROM IotDeviceData;
```

An error message follows:

[TABLE_OR_VIEW_NOT_FOUND] The table or view 'IotDeviceData' cannot be found. Verify the spelling and correctness of the schema and catalog. If you did not qualify the name with a schema, verify the current_schema() output, or qualify the name with the correct schema and catalog. To tolerate the error on drop use DROP VIEW IF EXISTS or DROP TABLE IF EXISTS.; line 1 pos 14;
Project [*]
+ 'UnresolvedRelation [IotDeviceData], [], false

org.apache.spark.sql.catalyst.analysis.package\$AnalysisErrorAt.tableNotFound(package.scala:87)
org.apache.spark.sql.catalyst.analysis.CheckAnalysis.\$anonfun\$checkAnalysis\$2(CheckAnalysis.scala:235)
org.apache.spark.sql.catalyst.analysis.\$anonfun\$checkAnalysis\$2\$adapted(CheckAnalysis.scala:215)
org.apache.spark.sql.catalyst.trees.TreeNode.foreachUp(TreeNode.scala:244)
org.apache.spark.sql.catalyst.trees.TreeNode.foreachUp\$1(TreeNode.scala:243)
org.apache.spark.sql.catalyst.trees.TreeNode.\$anonfun\$foreachUp\$1\$adapted(TreeNode.scala:243)
scala.collection.Iterator.foreach(Iterator.scala:943)
scala.collection.Iterator.foreach(Iterator.scala:943)
scala.collection.AbstractIterator.foreach(Iterator.scala:1431)
scala.collection.IterableLike.foreach(IterableLike.scala:74)
scala.collection.IterableLike.foreach\$(IterableLike.scala:73)
scala.collection.AbstractIterable.foreach(Iterable.scala:56)

Error occurred because the code written in line 2 of codebox 27 is incorrect.

(`delta_stream_table_path = 'Tables/iotdevicedata'`) The code created a Schema 'iotdevicedata' instead of a Table, as seen above.

Hence the Error: TABLE_OR_VIEW_NOT_FOUND

The screenshot shows the same Databricks workspace. The code in code box [27] has been modified to drop the schema before creating the table:

```
1 %%sql
2 DROP SCHEMA IF EXISTS iotdevicedata CASCADE;
```

This command executes successfully in code box [39]. In code box [40], the original code for writing to the delta table is run again:

```
1 # Write the stream to a delta table
2 delta_stream_table_path = 'Tables/dbo/iotdevicedata'
3 checkpointpath = 'Files/delta/checkpoint'
4 deltaStream = iotstream.writeStream.format("delta").option("checkpointLocation", checkpointpath).start(delta_stream_table_path)
5 print("Streaming to delta sink...")
```

This second run also succeeds, indicating the schema was dropped and the table was created successfully.

I dropped the created Schema and edited the line 2 code to (`delta_stream_table_path = 'Tables/dbo/iotdevicedata'`) and this created the table inside the dbo Schema, which made it possible for me to run the previous failed SQL SELECT statement.