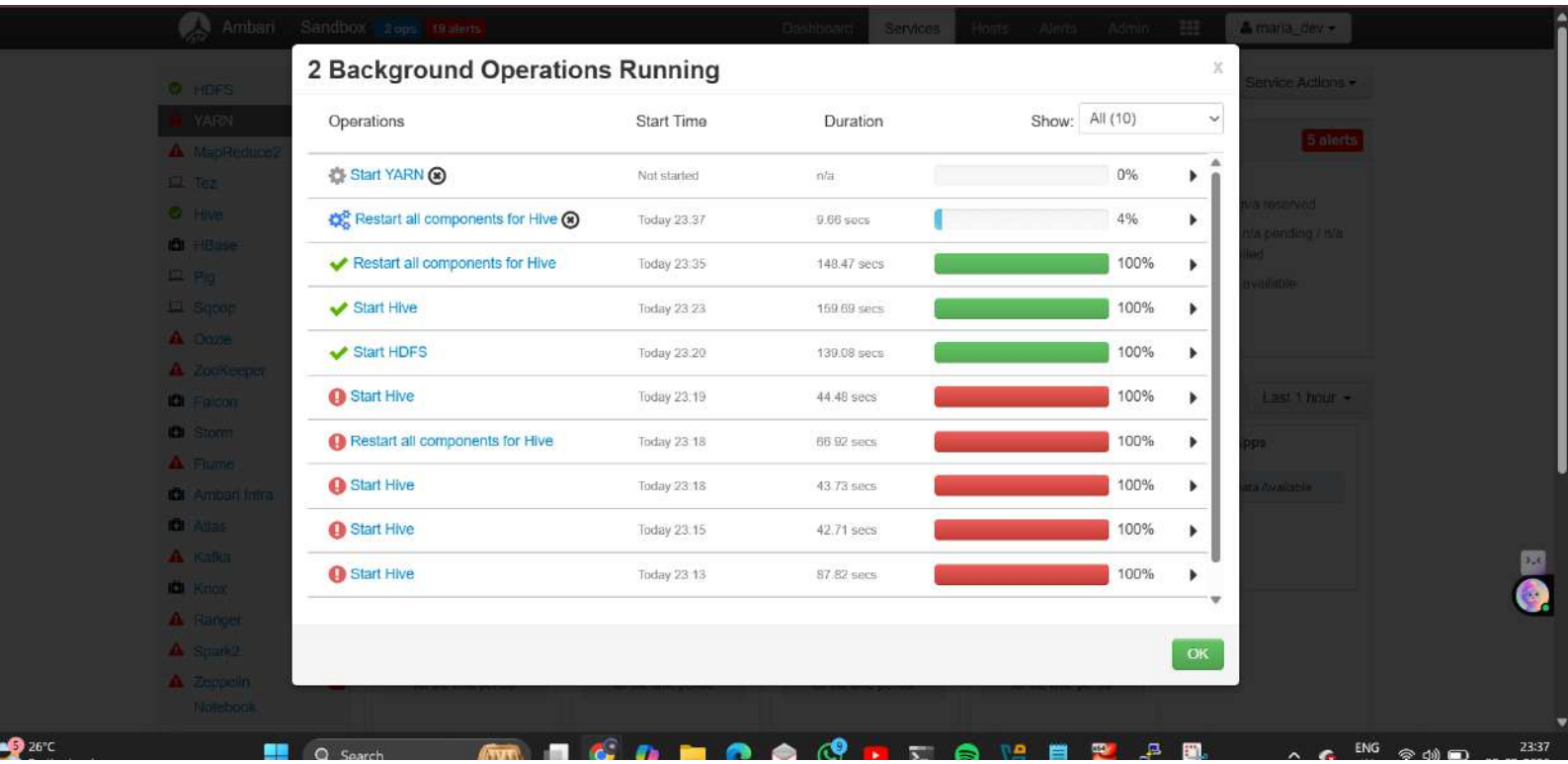
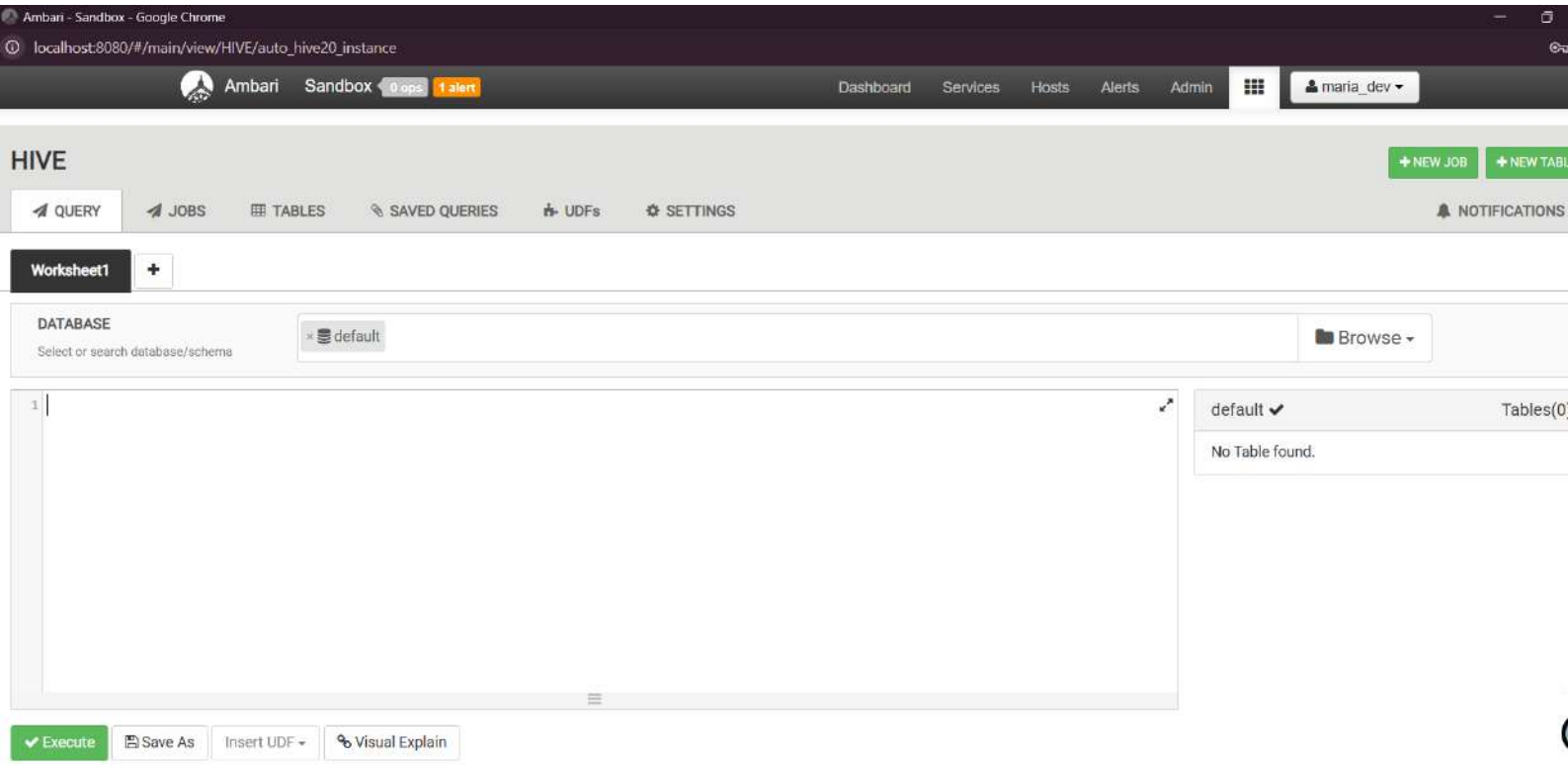
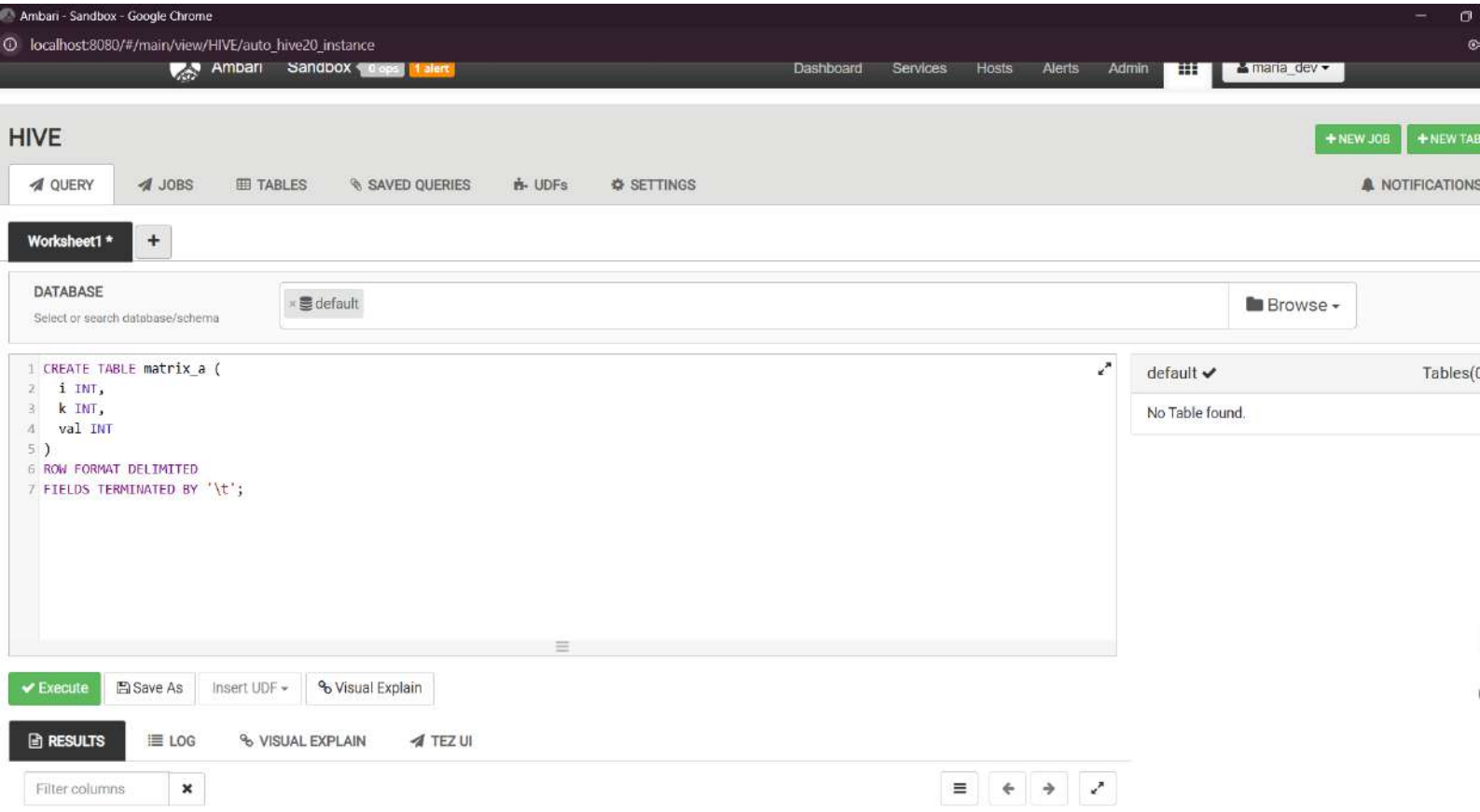
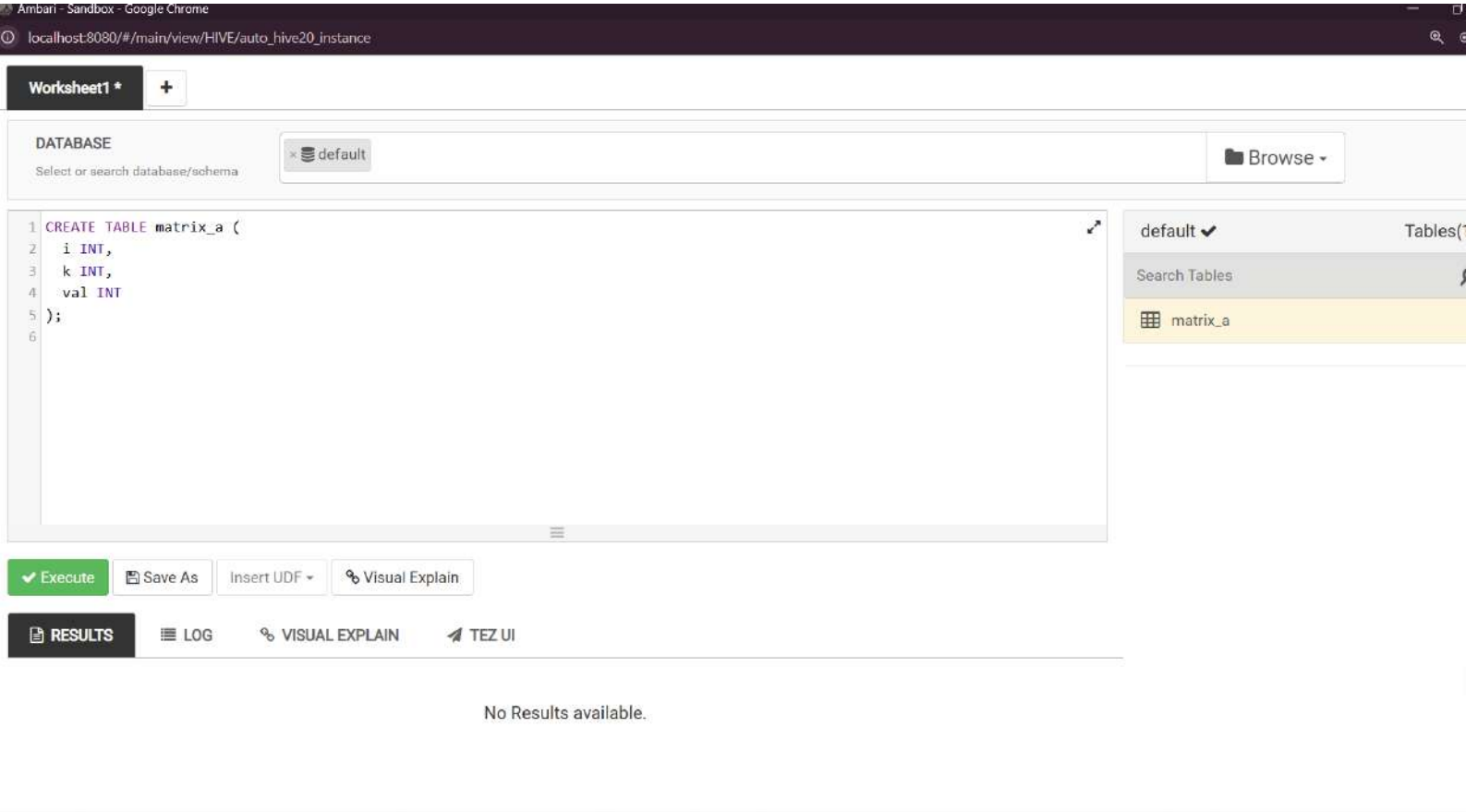
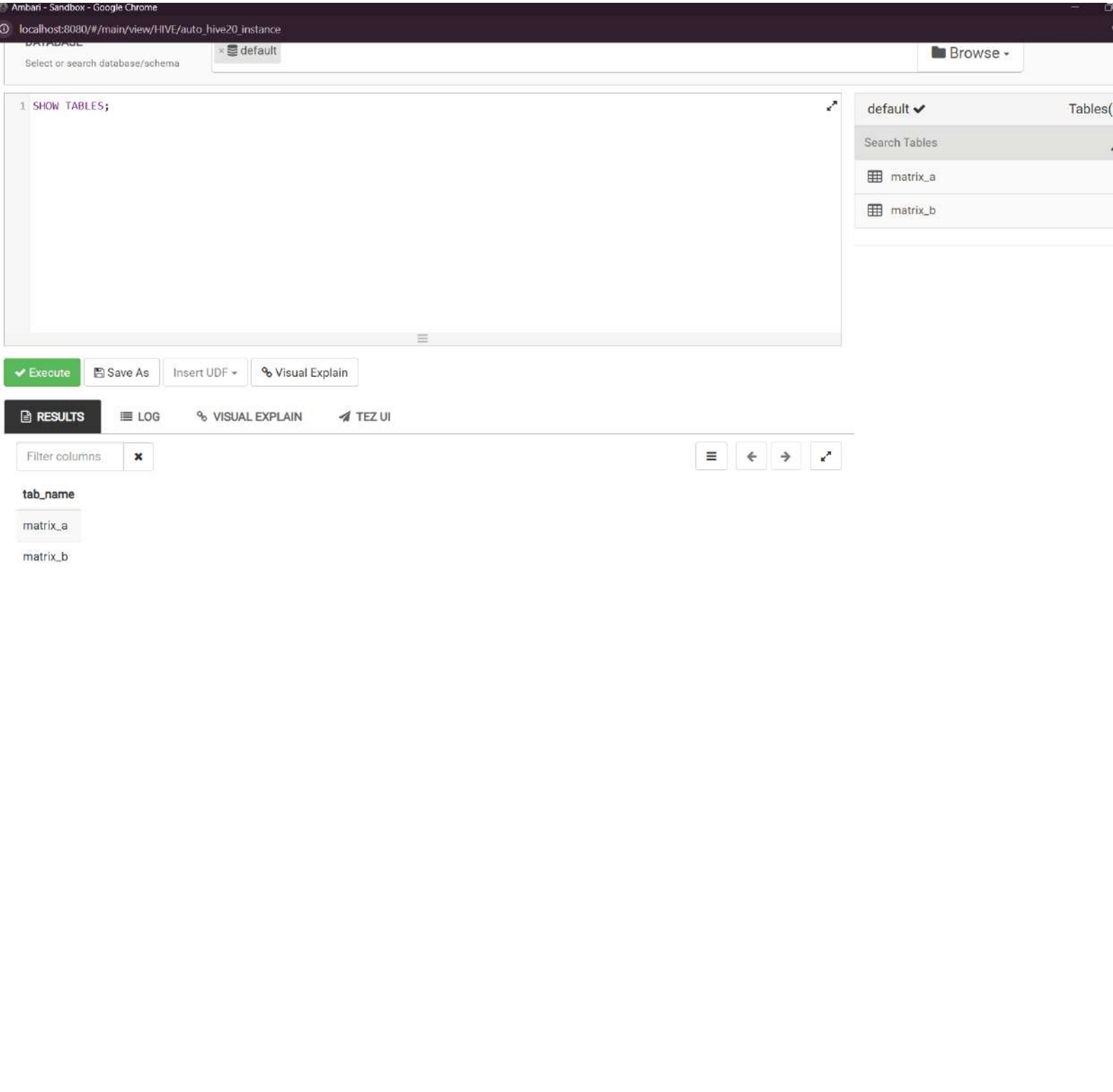
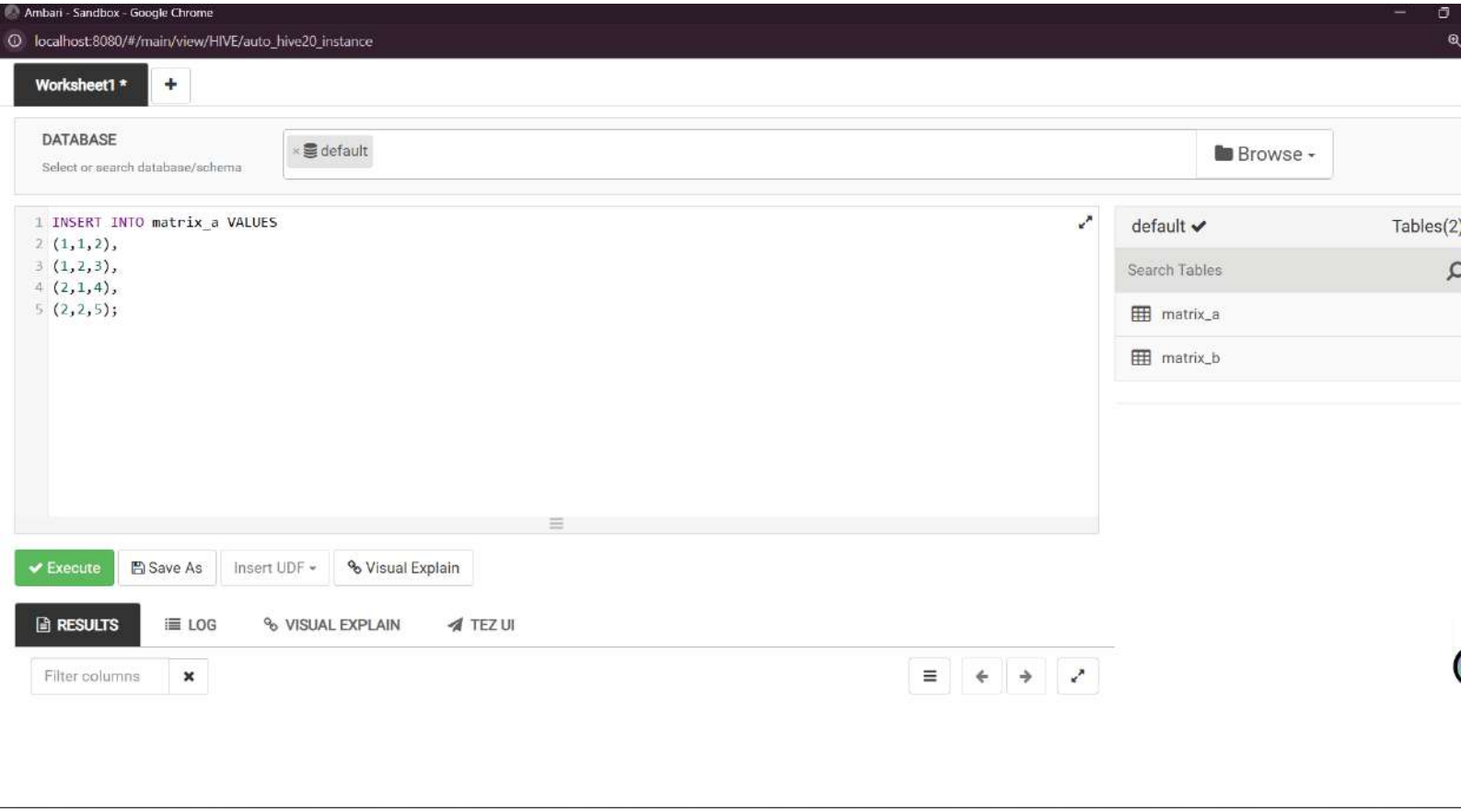

2 Background Operations Running
Operations
Start Time
Duration
Show: All (10)
Start YARN
Not started
n/a
0%
Restart all components for Hive
Today 23:37
9.66 secs
4%
Restart all components for Hive
Today 23:35
148.47 secs
100%
Start Hive
Today 23:23
159.69 secs
100%
Start HDFS
Today 23:20
139.08 secs
100%
Start Hive
Today 23:19
44.48 secs
100%
Restart all components for Hive
Today 23:18
66.92 secs
100%
Start Hive
Today 23:18
43.73 secs
100%
Start Hive
Today 23:15
42.71 secs
100%
Start Hive
Today 23:13
87.82 secs
100%
OK

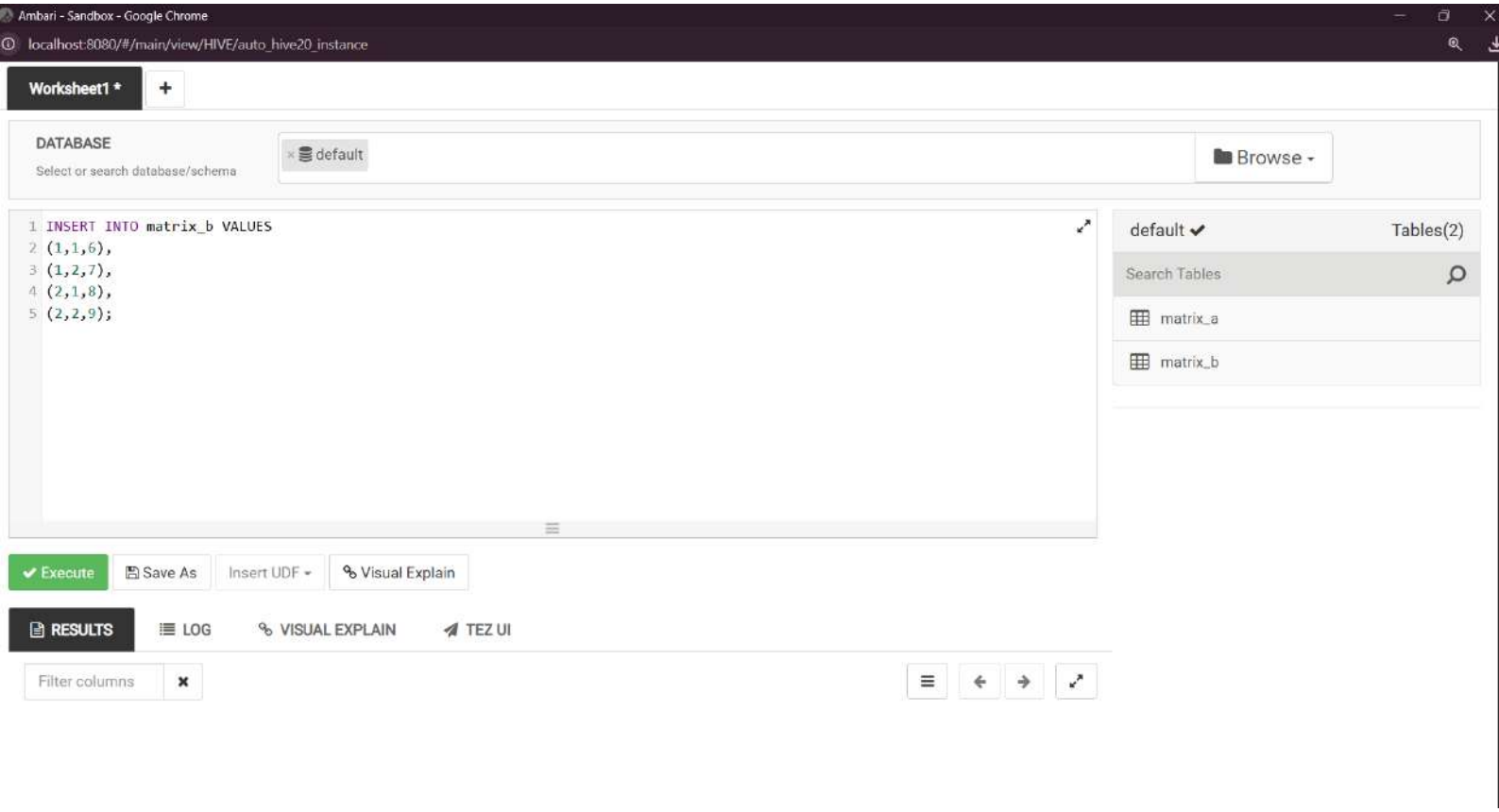

Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
Ambari
Sandbox
0 ops
1 alert
Dashboard
Services
Hosts
Alerts
Admin
maria_dev
HIVE
NEW JOB
QUERY
JOBS
TABLES
SAVED QUERIES
UDFs
SETTINGS
NOTIFICATIONS
Worksheet1
DATABASE
Select or search database/schema
default
Browse
default
Tables(0)
No Table found.
Execute
Save As
Insert UDF
Visual Explain

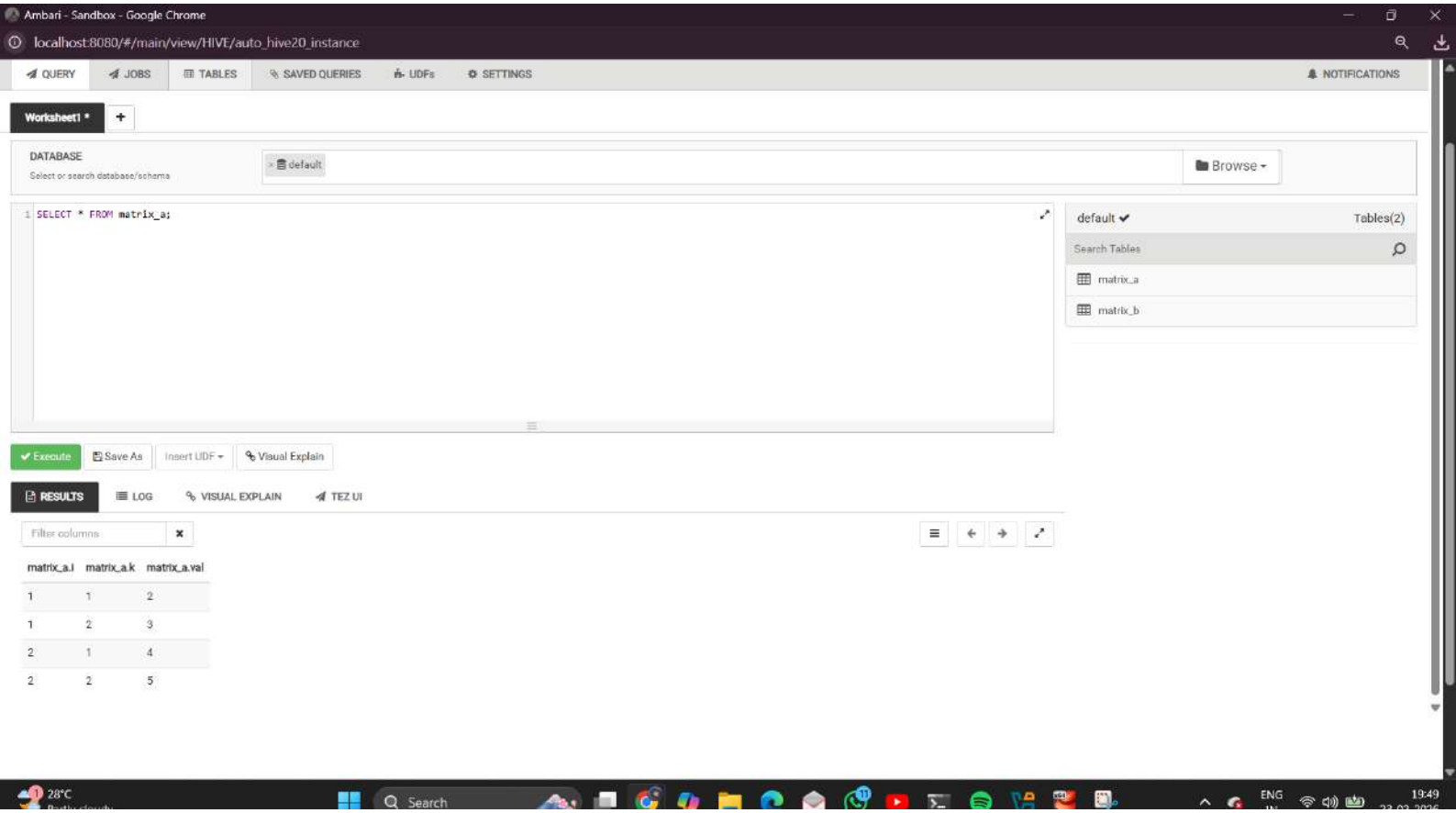

Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
Ambari Sandbox 0 ops 1 alert
Dashboard Services Hosts Alerts Admin maria_dev
HIVE
+ NEW JOB
+ NEW TAB
QUERY JOBS TABLES SAVED QUERIES UDFs SETTINGS
NOTIFICATIONS
Worksheet1 *
+
DATABASE
Select or search database/schema
default
Browse
1 CREATE TABLE matrix_a (
2 i INT,
3 k INT,
4 val INT
5)
6 ROW FORMAT DELIMITED
7 FIELDS TERMINATED BY '\t';
default
Tables(0
No Table found.
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns

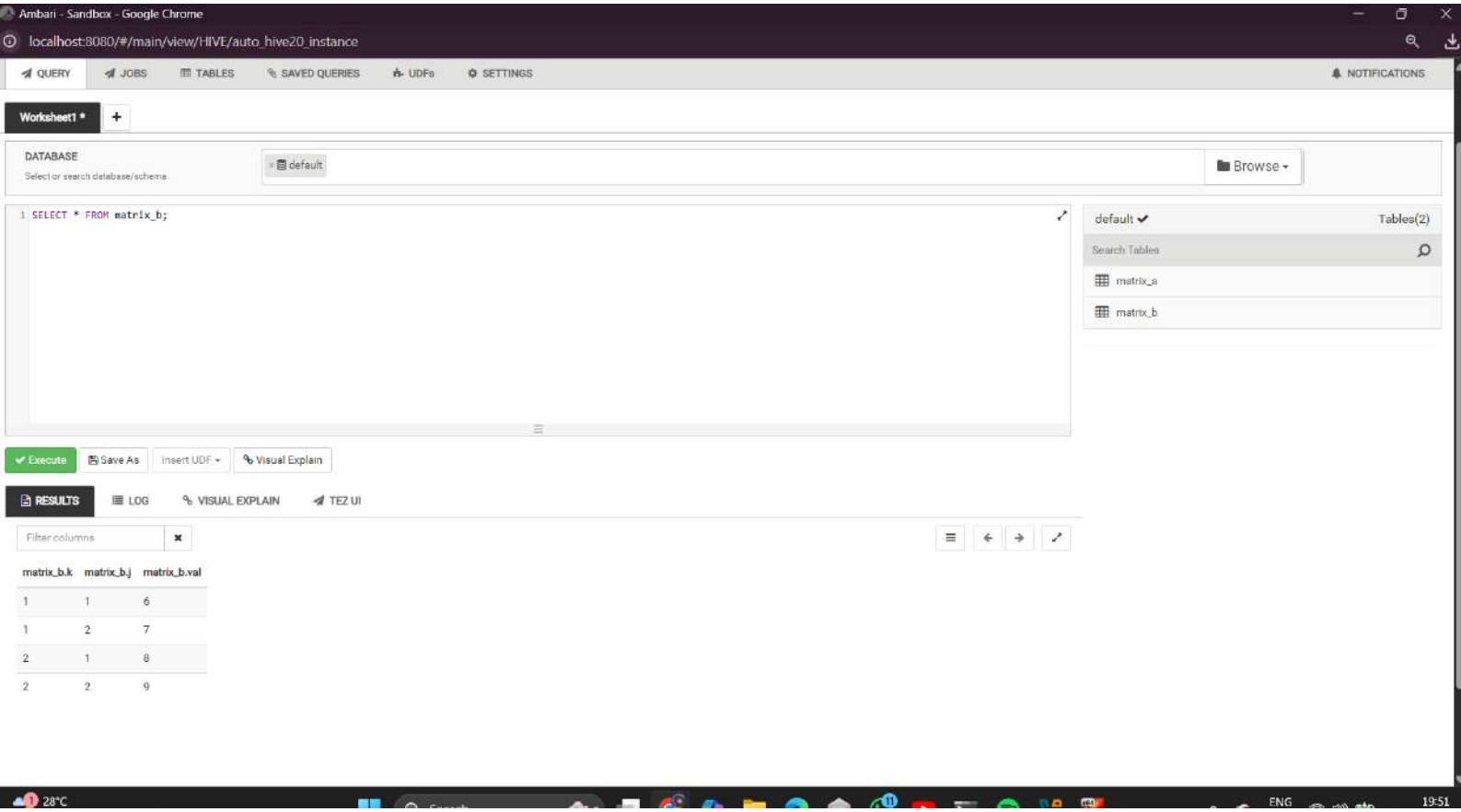

Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
Worksheet1 *
DATABASE
Select or search database/schema
default
Browse
CREATE TABLE matrix_a (
i INT,
k INT,
val INT
);
default
Search Tables
matrix_a
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
No Results available.

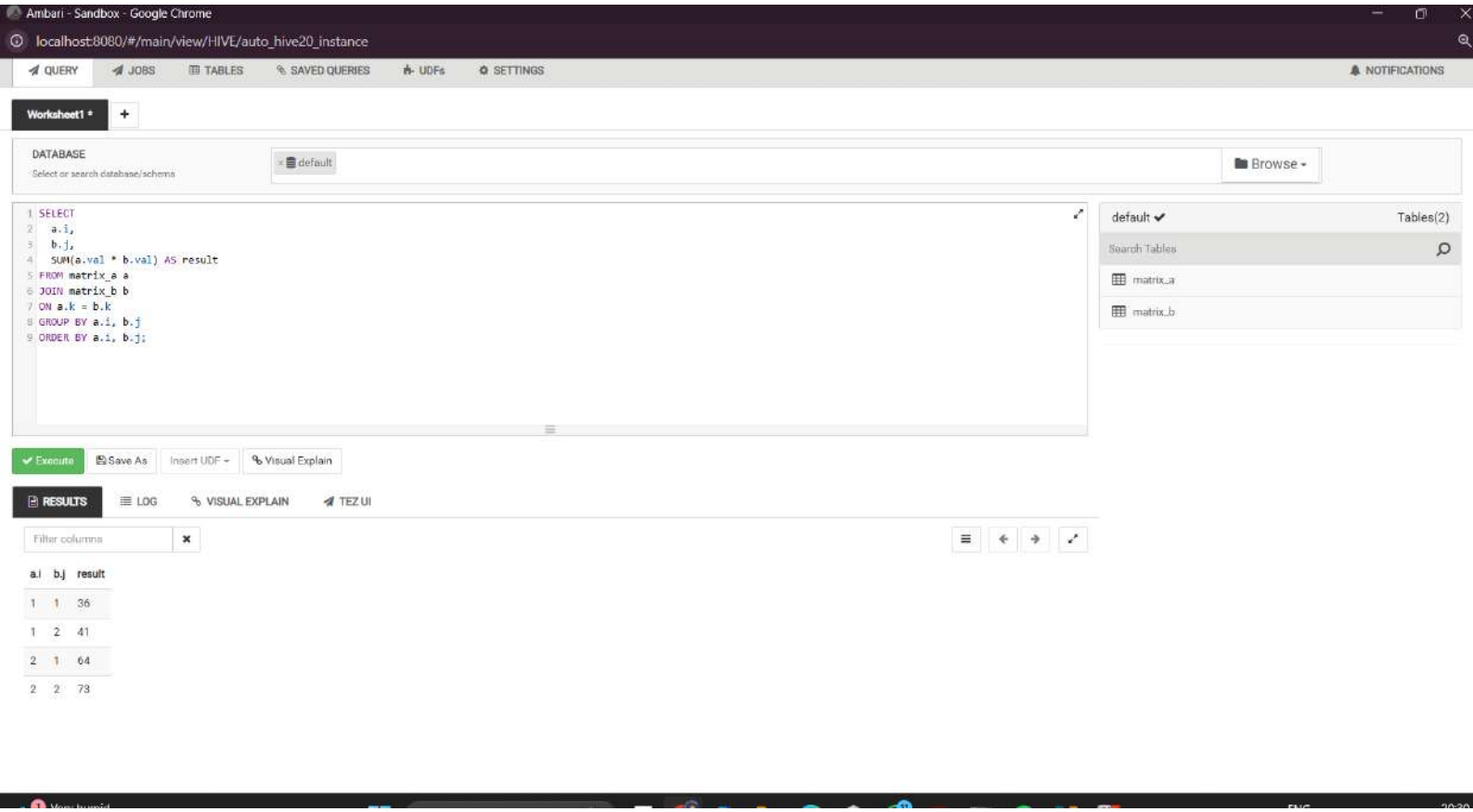

Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
Select or search database/schema
default
Browse
1 SHOW TABLES;
default
Search Tables
matrix_a
matrix_b
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns
tab_name
matrix_a
matrix_b


Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
Worksheet1 *
DATABASE
Select or search database/schema
default
Browse
1 INSERT INTO matrix_a VALUES
2 (1,1,2),
3 (1,2,3),
4 (2,1,4),
5 (2,2,5);
default
Tables(2)
Search Tables
matrix_a
matrix_b
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns


Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
Worksheet1 *
DATABASE
Select or search database/schema
default
Browse
INSERT INTO matrix_b VALUES
(1,1,6),
(1,2,7),
(2,1,8),
(2,2,9);
default
Tables(2)
Search Tables
matrix_a
matrix_b
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns


Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
QUERY
JOBS
TABLES
SAVED QUERIES
UDFs
SETTINGS
NOTIFICATIONS
Worksheet1 *
DATABASE
Select or search database/schema
default
Browse
SELECT * FROM matrix_a;
default
Tables(2)
Search Tables
matrix_a
matrix_b
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns
matrix_a.i
matrix_a.k
matrix_a.val
1 1 2
1 2 3
2 1 4
2 2 5
28°C
Search
ENG
19:49


Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
QUERY
JOBS
TABLES
SAVED QUERIES
UDFs
SETTINGS
NOTIFICATIONS
Worksheet1 *
DATABASE
Select or search database/schema
default
Browse
1 SELECT * FROM matrix_b;
default
Tables(2)
Search Tables
matrix_a
matrix_b
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns
matrix_b.k matrix_b.j matrix_b.val
1 1 6
1 2 7
2 1 8
2 2 9
28°C
ENG
19:51


Ambari - Sandbox - Google Chrome
localhost:8080/#/main/view/HIVE/auto_hive20_instance
QUERY
JOBS
TABLES
SAVED QUERIES
UDFs
SETTINGS
NOTIFICATIONS
Worksheet1 *
DATABASE
Select or search database/schema
default
Browse
SELECT
a.i,
b.j,
SUM(a.val * b.val) AS result
FROM matrix_a a
JOIN matrix_b b
ON a.k = b.k
GROUP BY a.i, b.j
ORDER BY a.i, b.j;
default
Tables(2)
Search Tables
matrix_a
matrix_b
Execute
Save As
Insert UDF
Visual Explain
RESULTS
LOG
VISUAL EXPLAIN
TEZ UI
Filter columns
a.i b.j result
1 1 36
1 2 41
2 1 64
2 2 73

1.xml | Super 👍 — if you already know sor | README.txt | Experiment-03 Matrix Multiplicatio

File Edit View

Experiment-03: Matrix Multiplication Using Hive – Short Steps

Started Hadoop Sandbox in VirtualBox.

Opened Ambari → http://localhost:8080

Logged in as admin.

Started HDFS, YARN, Hive services.

Opened Hive View 2.0 (SQL editor).

Created table matrix_a.

Created table matrix_b.

Verified tables using SHOW TABLES.

Inserted values into matrix_a.

Inserted values into matrix_b.

Verified data using SELECT *.

Performed multiplication using JOIN + GROUP BY.

Calculated result matrix.

Displayed output in results tab.

Experiment completed successfully.