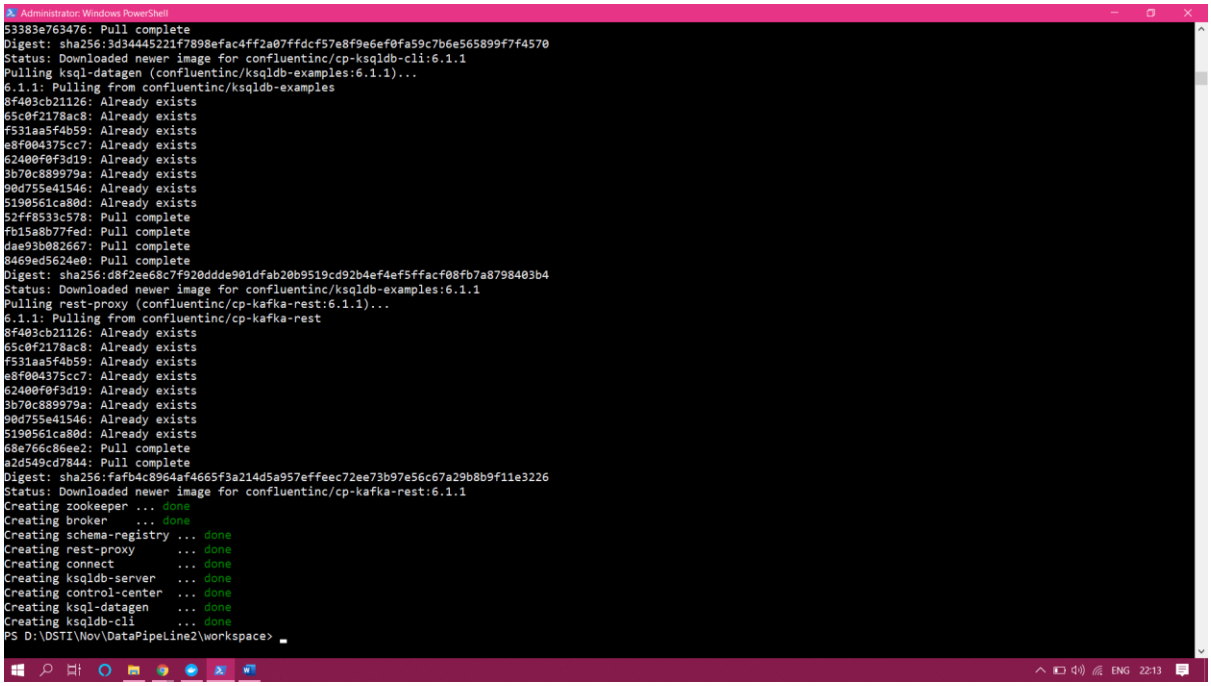
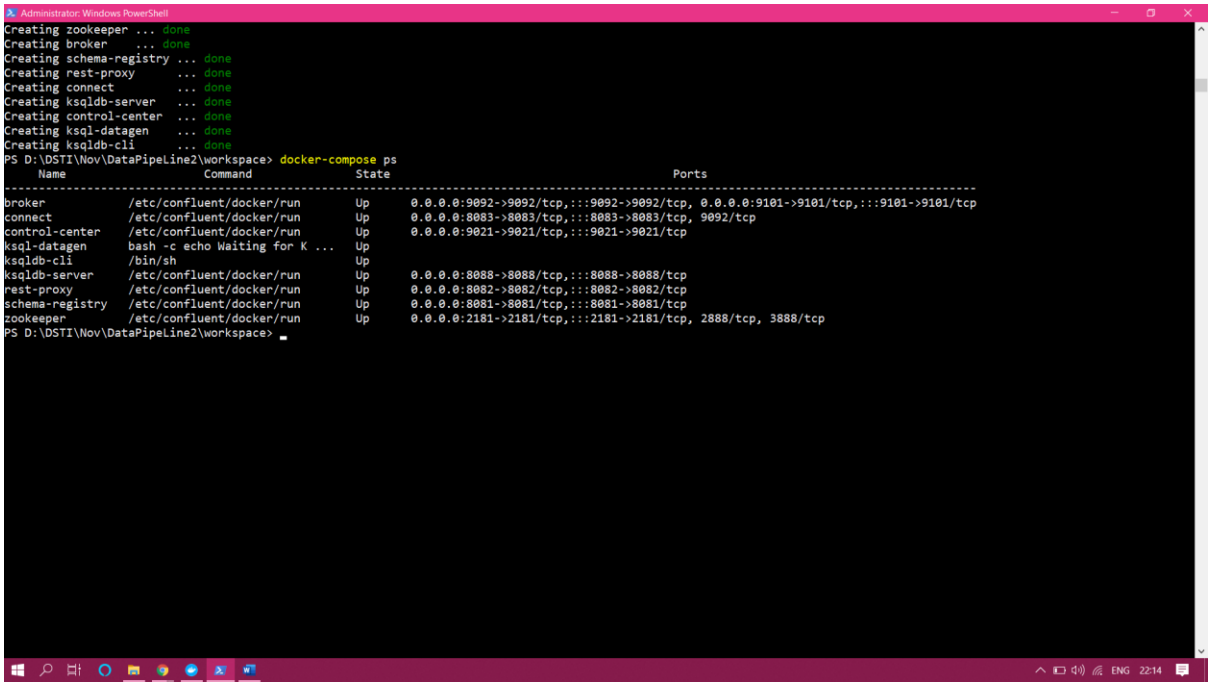
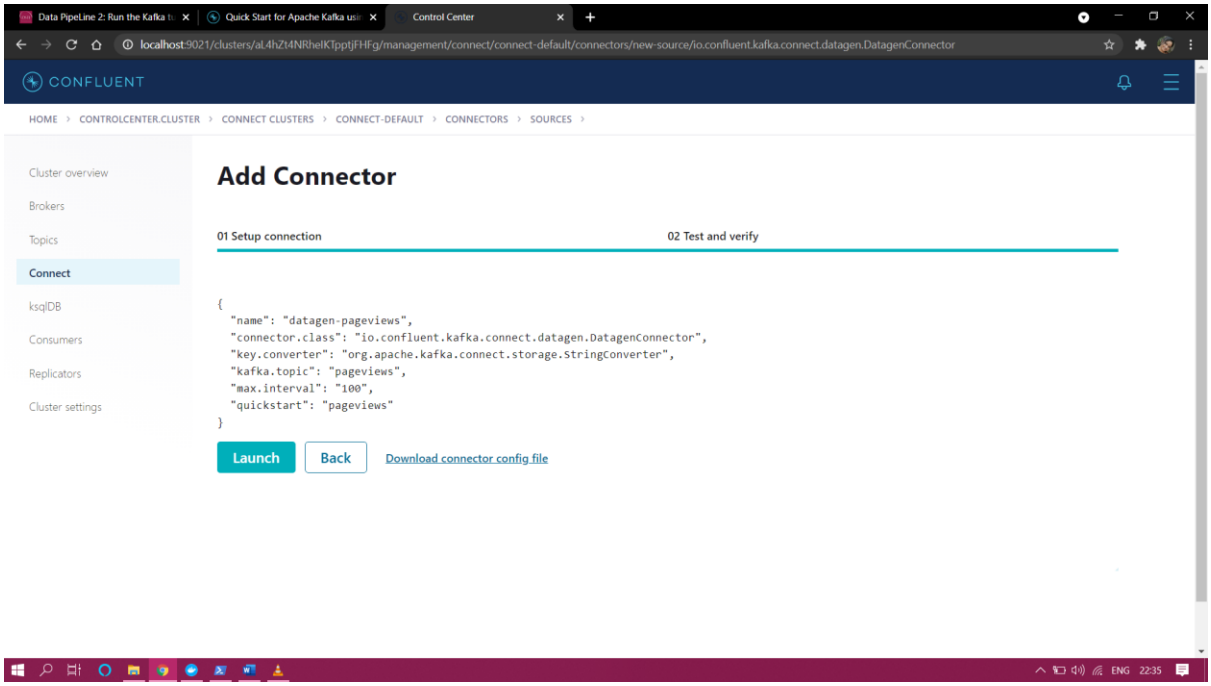
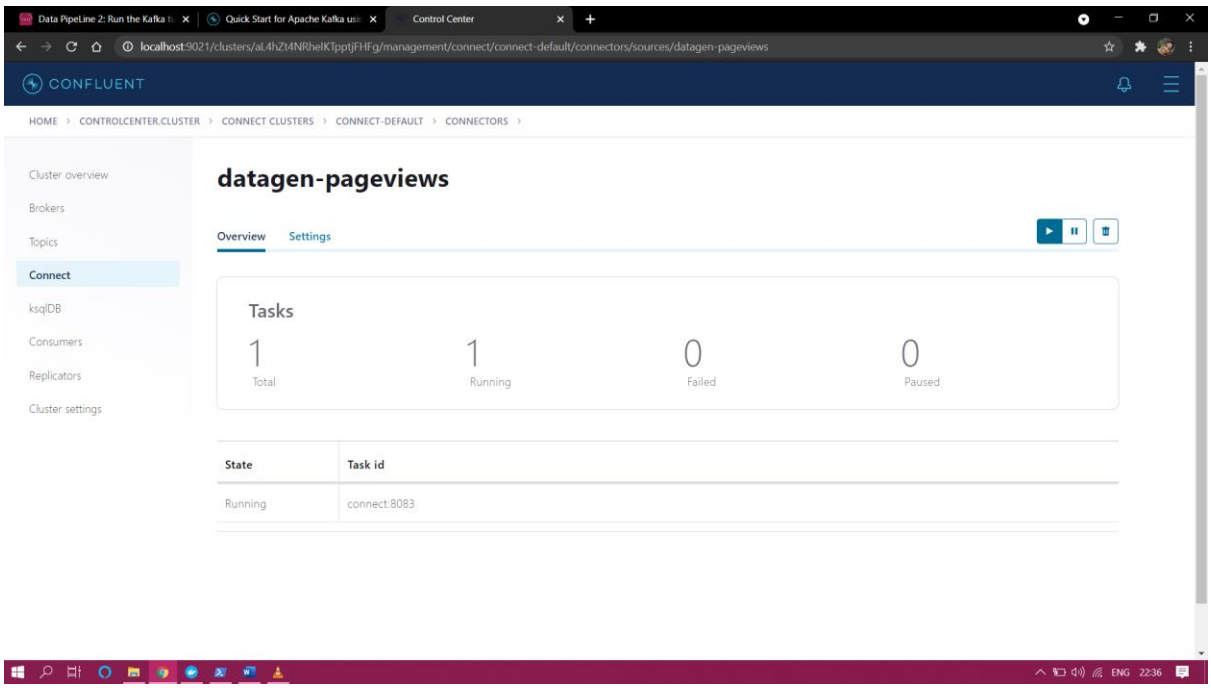
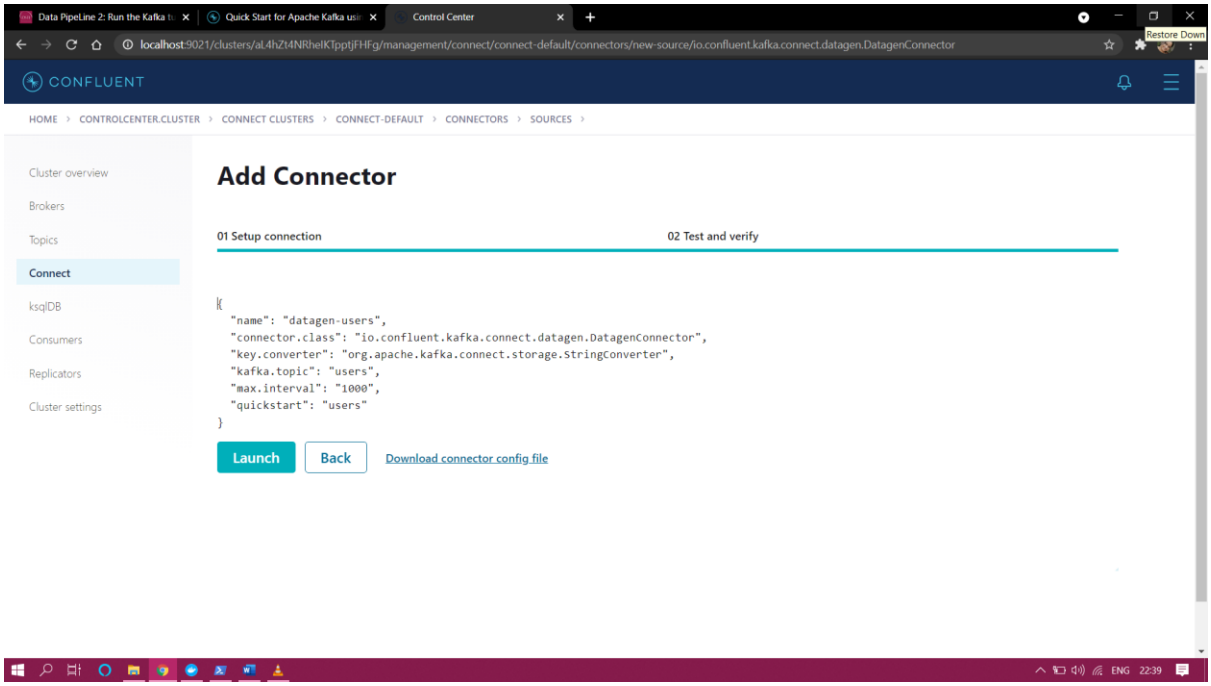
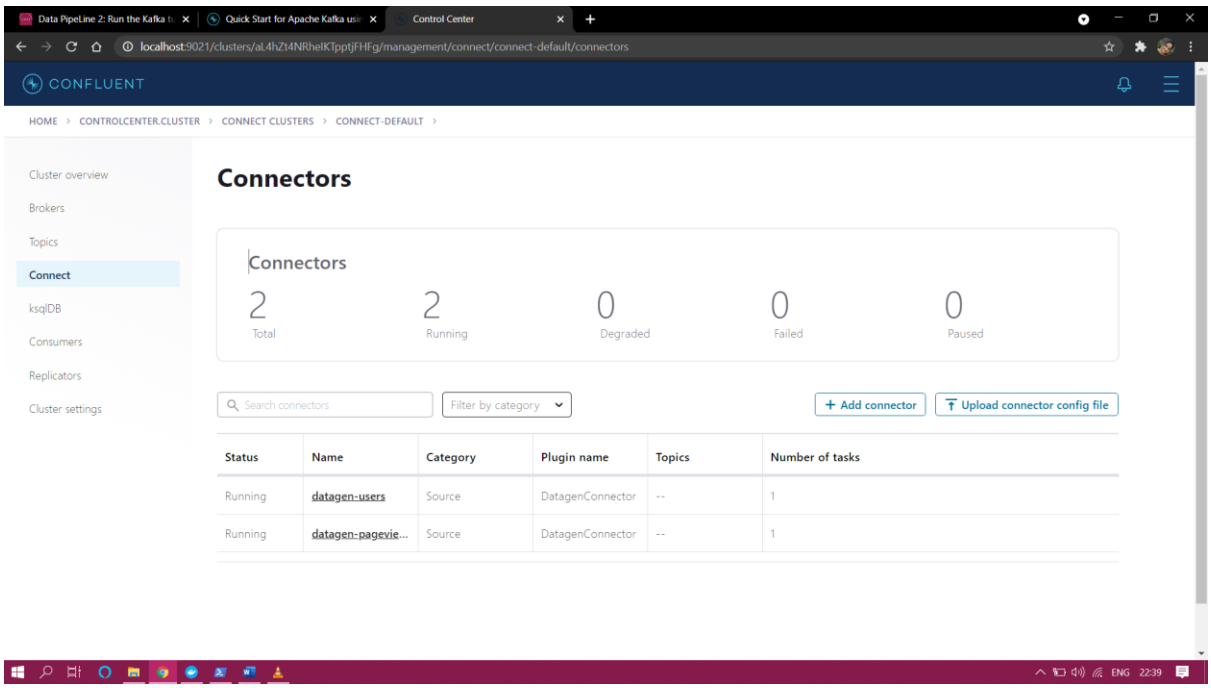

Administrator: Windows PowerShell
53383e763476: Pull complete
Digest: sha256:3d34445221f7898efac4ff2a07ffdcf57e8f9e6ef0fa59c7b6e565899f7f4570
Status: Downloaded newer image for confluentinc/cp-ksqldb-cli:6.1.1
Pulling ksql-datagen (confluentinc/ksqldb-examples:6.1.1)...
6.1.1: Pulling from confluentinc/ksqldb-examples
8f403cb21126: Already exists
65c0f2178ac8: Already exists
f531aa5f4b59: Already exists
e8f004375cc7: Already exists
62400f0f3d19: Already exists
3b70c889979a: Already exists
90d755e41546: Already exists
5190561ca80d: Already exists
52ff8533c578: Pull complete
fb15a8b77fed: Pull complete
dae93b082667: Pull complete
8469ed5624e0: Pull complete
Digest: sha256:d8f2ee68c7f920ddde901dfab20b9519cd92b4ef4ef5ffacf08fb7a8798403b4
Status: Downloaded newer image for confluentinc/ksqldb-examples:6.1.1
Pulling rest-proxy (confluentinc/cp-kafka-rest:6.1.1)...
6.1.1: Pulling from confluentinc/cp-kafka-rest
8f403cb21126: Already exists
65c0f2178ac8: Already exists
f531aa5f4b59: Already exists
e8f004375cc7: Already exists
62400f0f3d19: Already exists
3b70c889979a: Already exists
90d755e41546: Already exists
5190561ca80d: Already exists
68e766c86ee2: Pull complete
a2d549cd7844: Pull complete
Digest: sha256:fafb4c8964af4665f3a214d5a957effeec72ee73b97e56c67a29b8b9f11e3226
Status: Downloaded newer image for confluentinc/cp-kafka-rest:6.1.1
Creating zookeeper ... done
Creating broker   ... done
Creating schema-registry ... done
Creating rest-proxy   ... done
Creating connect   ... done
Creating ksqldb-server   ... done
Creating control-center ... done
Creating ksql-datagen   ... done
Creating ksqldb-cli   ... done
PS D:\DSTI\Nov\DataPipeLine2\workspace>
ENG 22:13

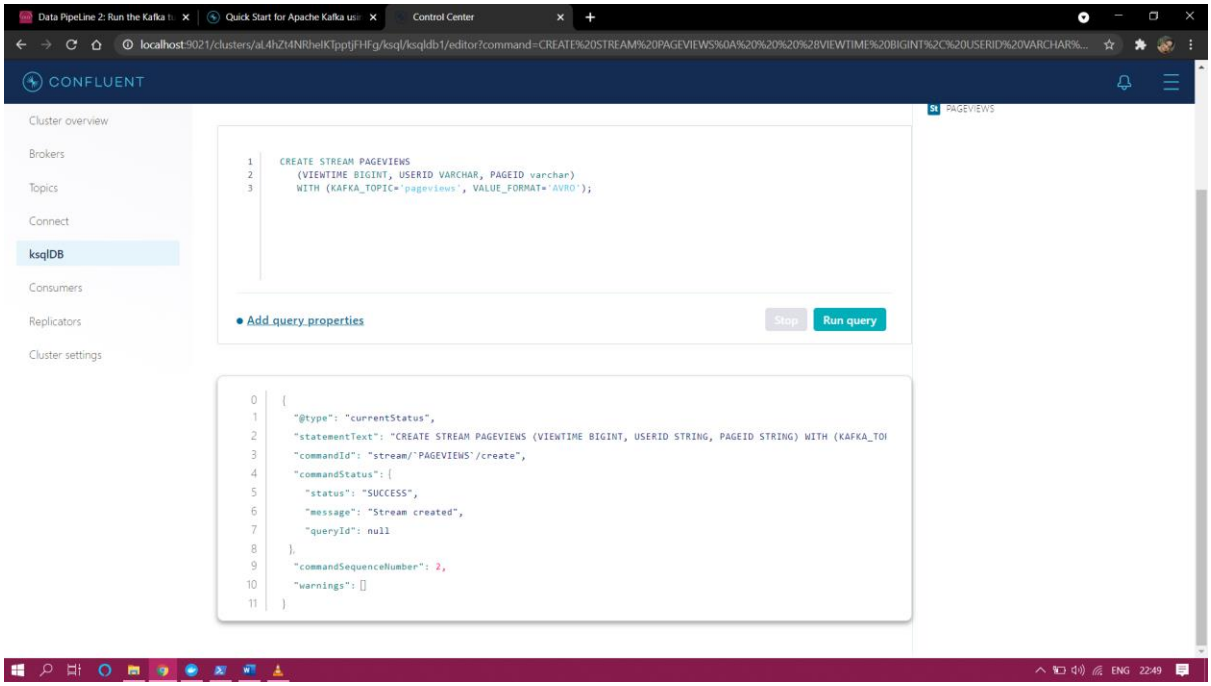

Administrator: Windows PowerShell
Creating zookeeper ... done
Creating broker   ... done
Creating schema-registry ... done
Creating rest-proxy   ... done
Creating connect   ... done
Creating ksqldb-server   ... done
Creating control-center ... done
Creating ksql-datagen   ... done
Creating ksqldb-cli   ... done
PS D:\DSTI\Nov\DataPipeLine2\workspace> docker-compose ps
Name Command State Ports
broker /etc/confluent/docker/run Up 0.0.0.0:9092->9092/tcp,:::9092->9092/tcp, 0.0.0.0:9101->9101/tcp,:::9101->9101/tcp
connect /etc/confluent/docker/run Up 0.0.0.0:8083->8083/tcp,:::8083->8083/tcp, 9092/tcp
control-center /etc/confluent/docker/run Up 0.0.0.0:9021->9021/tcp,:::9021->9021/tcp
ksql-datagen bash -c echo Waiting for K ... Up
ksqldb-cli /bin/sh Up
ksqldb-server /etc/confluent/docker/run Up 0.0.0.0:8088->8088/tcp,:::8088->8088/tcp
rest-proxy /etc/confluent/docker/run Up 0.0.0.0:8082->8082/tcp,:::8082->8082/tcp
schema-registry /etc/confluent/docker/run Up 0.0.0.0:8081->8081/tcp,:::8081->8081/tcp
zookeeper /etc/confluent/docker/run Up 0.0.0.0:2181->2181/tcp,:::2181->2181/tcp, 2888/tcp, 3888/tcp
PS D:\DSTI\Nov\DataPipeLine2\workspace>
ENG 22:14

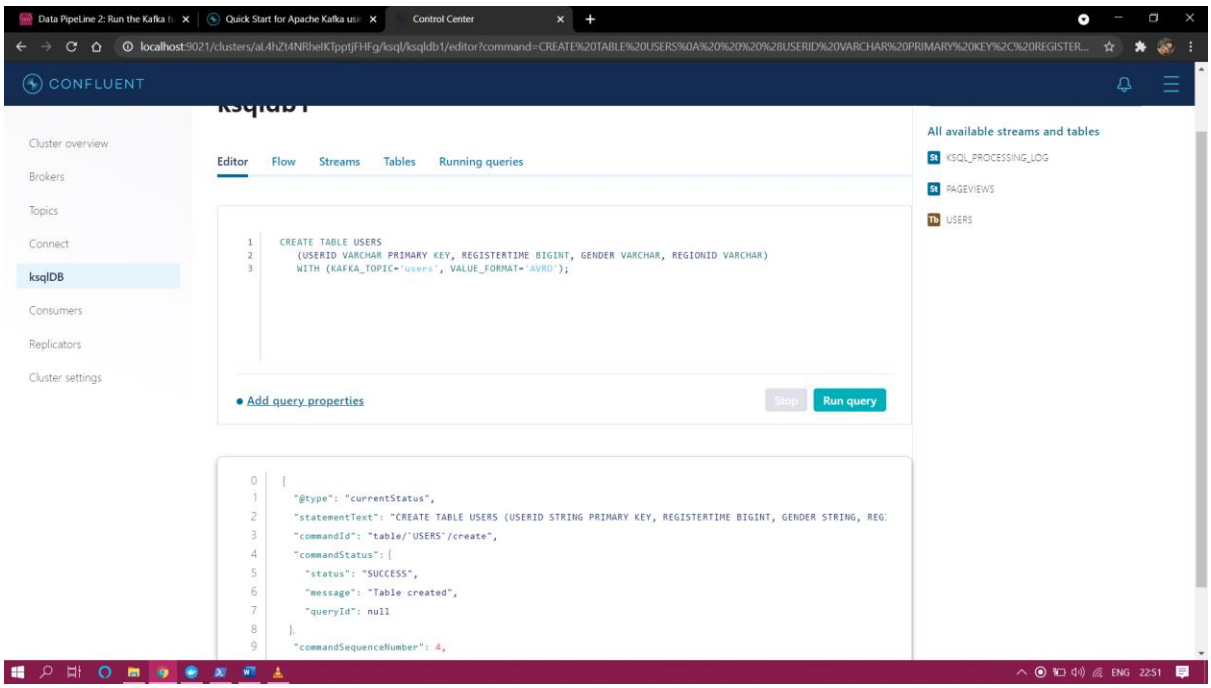

Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/management/connect/connect-default/connectors/new-source/io.confluent.kafka.connect.datagen.DatagenConnector
CONFLUENT
HOME › CONTROLCENTER.CLUSTER › CONNECT CLUSTERS › CONNECT-DEFAULT › CONNECTORS › SOURCES ›
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
Add Connector
01 Setup connection
02 Test and verify
{
"name": "datagen-pageviews",
"connector.class": "io.confluent.kafka.connect.datagen.DatagenConnector",
"key.converter": "org.apache.kafka.connect.storage.StringConverter",
"kafka.topic": "pageviews",
"max.interval": "100",
"quickstart": "pageviews"
}
Launch
Back
Download connector config file
ENG
22:35

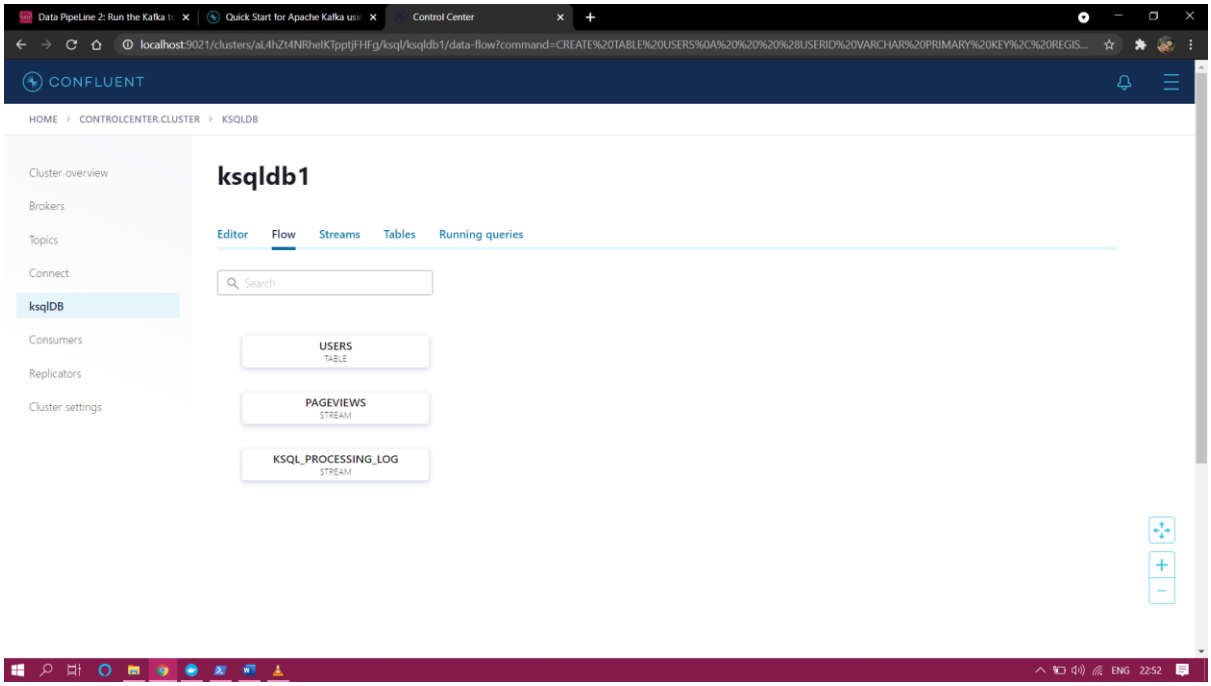

Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/management/connect/connect-default/connectors/sources/datagen-pageviews
CONFLUENT
HOME › CONTROLCENTER.CLUSTER › CONNECT CLUSTERS › CONNECT-DEFAULT › CONNECTORS ›
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
datagen-pageviews
Overview
Settings
Tasks
1
Total
1
Running
0
Failed
0
Paused
State
Task id
Running
connect:8083
ENG
22:36


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
Restore Down
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/management/connect/connect-default/connectors/new-source/io.confluent.kafka.connect.datagen.DatagenConnector
CONFLUENT
HOME › CONTROLCENTER.CLUSTER › CONNECT CLUSTERS › CONNECT-DEFAULT › CONNECTORS › SOURCES ›
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
Add Connector
01 Setup connection
02 Test and verify
{
"name": "datagen-users",
"connector.class": "io.confluent.kafka.connect.datagen.DatagenConnector",
"key.converter": "org.apache.kafka.connect.storage.StringConverter",
"kafka.topic": "users",
"max.interval": "1000",
"quickstart": "users"
}
Launch
Back
Download connector config file
ENG
22:39


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/management/connect/connect-default/connectors
CONFLUENT
HOME › CONTROLCENTER.CLUSTER › CONNECT CLUSTERS › CONNECT-DEFAULT ›
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
Connectors
Connectors
2
Total
2
Running
0
Degraded
0
Failed
0
Paused
Search connectors
Filter by category
+ Add connector
Upload connector config file
Status
Name
Category
Plugin name
Topics
Number of tasks
Running
datagen-users
Source
DatagenConnector
--
1
Running
datagen-pagevie...
Source
DatagenConnector
--
1
ENG
22:39


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/editor?command=CREATE%20STREAM%20PAGEVIEWS%0A%20%20%20%28VIEWTIME%20BIGINT%2C%20USERID%20VARCHAR%...
CONFLUENT
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
PAGEVIEWS
CREATE STREAM PAGEVIEWS
(VIEWTIME BIGINT, USERID VARCHAR, PAGEID varchar)
WITH (KAFKA_TOPIC='pageviews', VALUE_FORMAT='AVRO');
Add query properties
Stop
Run query
{
"@type": "currentStatus",
"statementText": "CREATE STREAM PAGEVIEWS (VIEWTIME BIGINT, USERID STRING, PAGEID STRING) WITH (KAFKA_TO
"commandId": "stream/`PAGEVIEWS`/create",
"commandStatus": {
"status": "SUCCESS",
"message": "Stream created",
"queryId": null
},
"commandSequenceNumber": 2,
"warnings": []
}
ENG 22:49


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/editor?command=CREATE%20TABLE%20USERS%0A%20%20%20%28USERID%20VARCHAR%20PRIMARY%20KEY%2C%20REGISTER...
CONFLUENT
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
Editor
Flow
Streams
Tables
Running queries
All available streams and tables
KSQL_PROCESSING_LOG
PAGEVIEWS
USERS
CREATE TABLE USERS
(USERID VARCHAR PRIMARY KEY, REGISTERTIME BIGINT, GENDER VARCHAR, REGIONID VARCHAR)
WITH (KAFKA_TOPIC='users', VALUE_FORMAT='AVRO');
Add query properties
Stop
Run query
{
"@type": "currentStatus",
"statementText": "CREATE TABLE USERS (USERID STRING PRIMARY KEY, REGISTERTIME BIGINT, GENDER STRING, REG
"commandId": "table/`USERS`/create",
"commandStatus": {
"status": "SUCCESS",
"message": "Table created",
"queryId": null
},
"commandSequenceNumber": 4,
ENG 22:51


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/data-flow?command=CREATE%20TABLE%20USERS%0A%20%20%20%28USERID%20VARCHAR%20PRIMARY%20KEY%2C%20REGIS...
CONFLUENT
HOME › CONTROLCENTER.CLUSTER › KSQLDB
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ksqlDB
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Replicators
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ksqldb1
Editor
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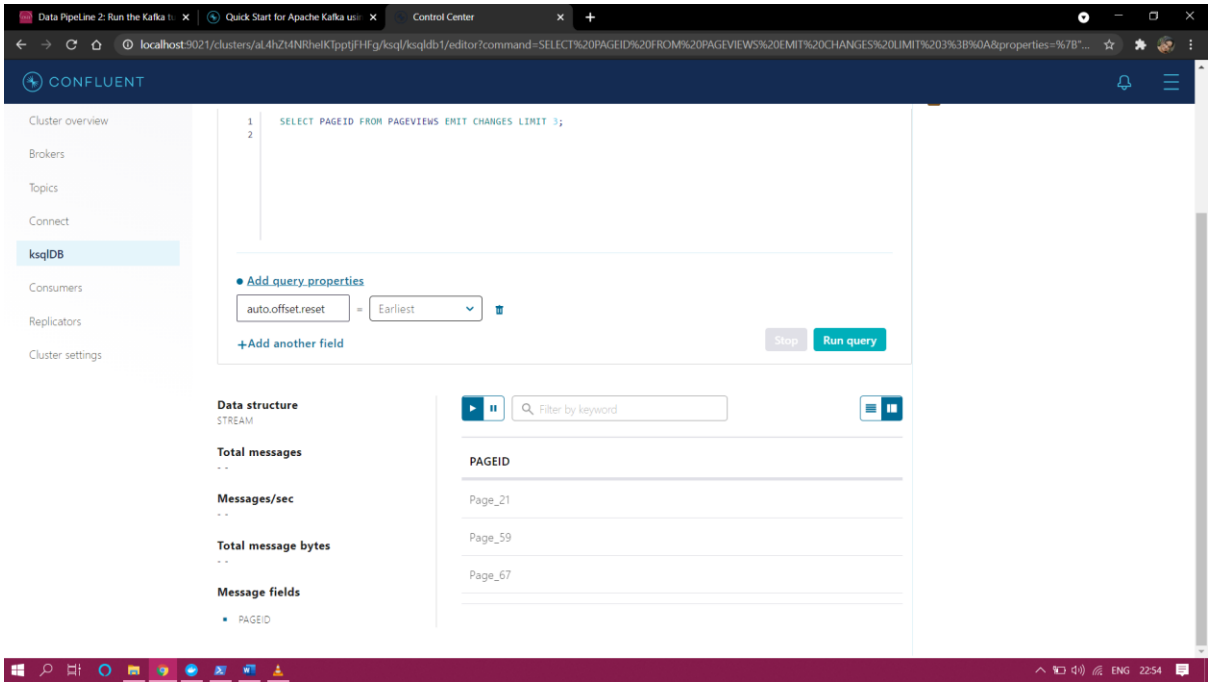
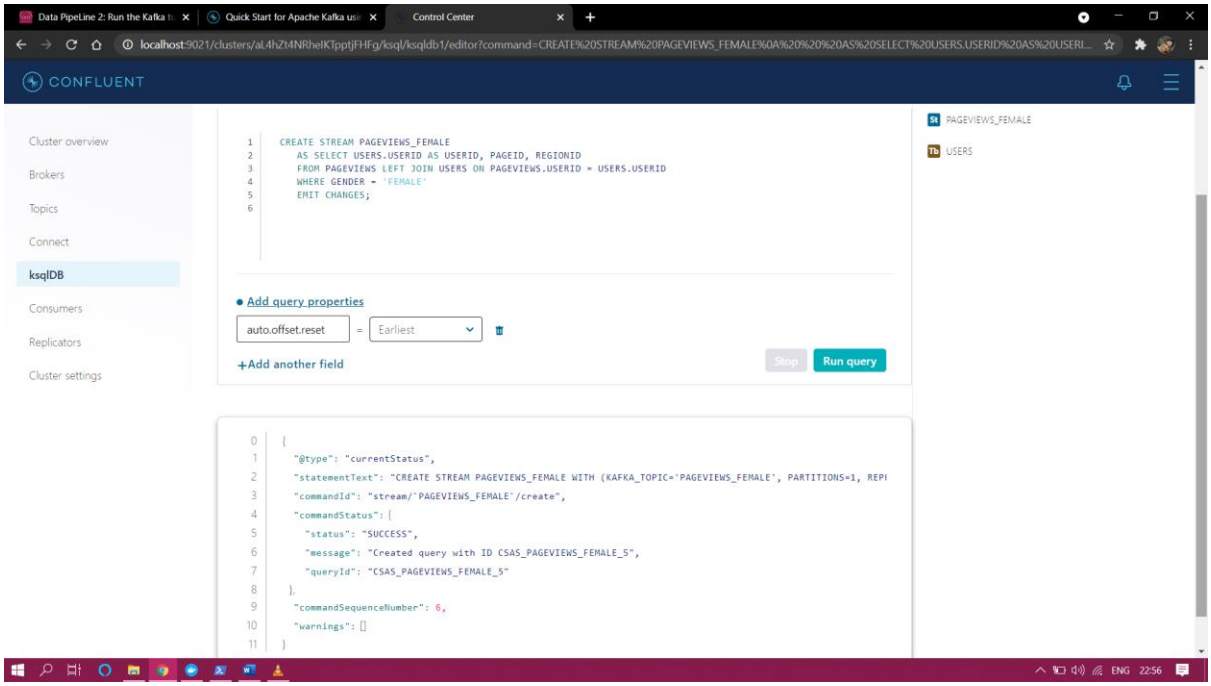
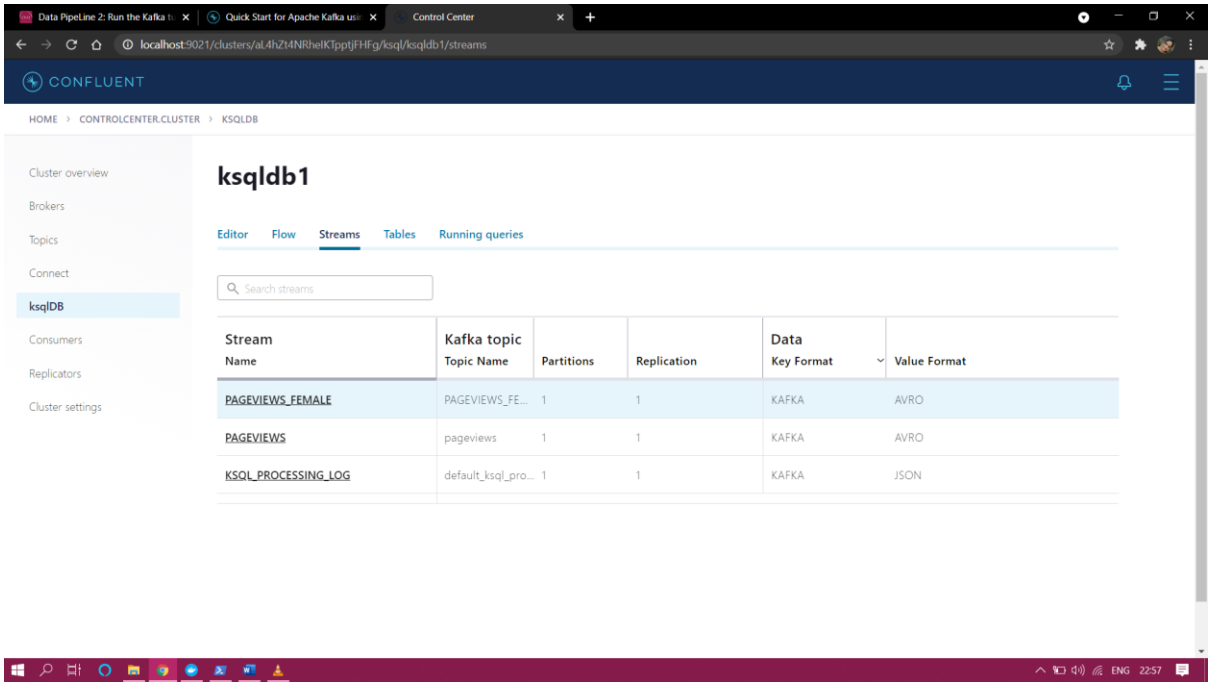
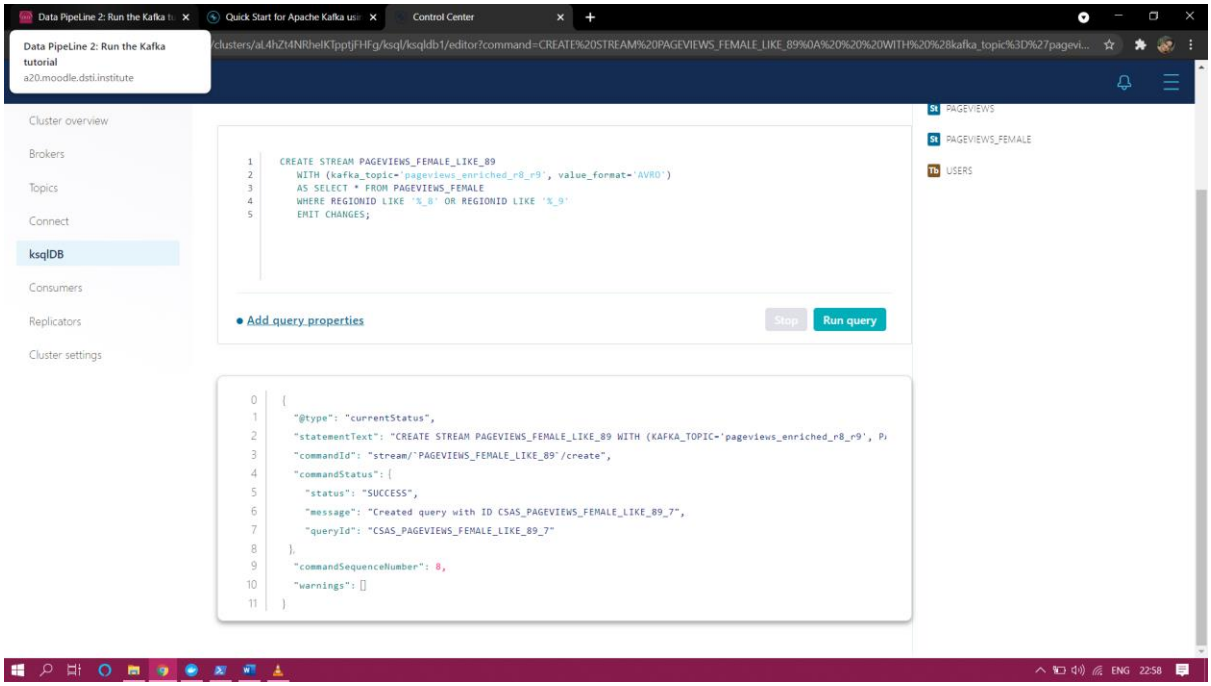
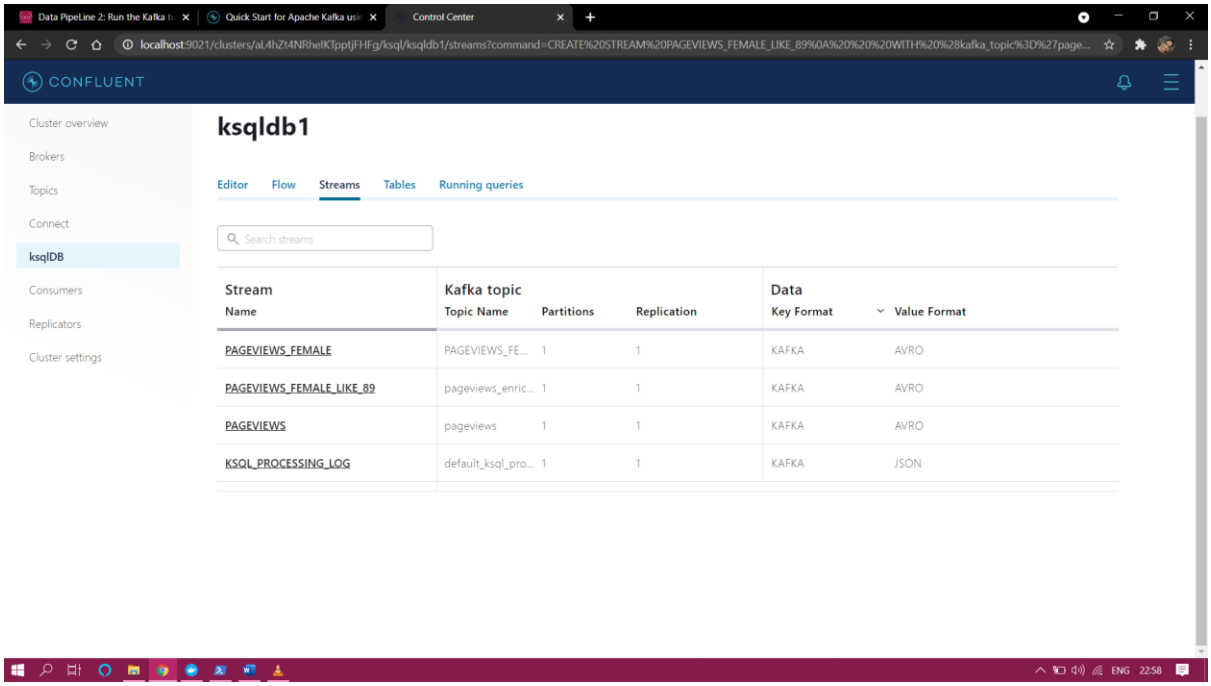
Streams
Tables
Running queries
Search
USERS
TABLE
PAGEVIEWS
STREAM
KSQL_PROCESSING_LOG
STREAM
ENG
22:52

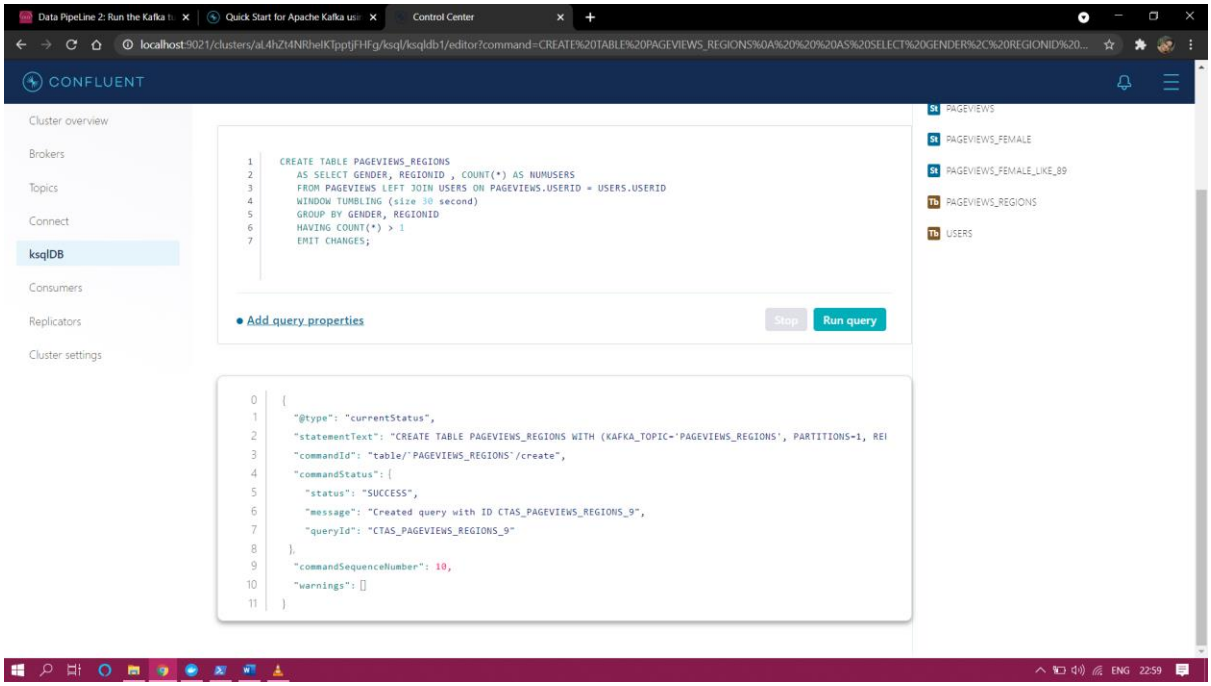

Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/editor?command=SELECT%20PAGEID%20FROM%20PAGEVIEWS%20EMIT%20CHANGES%20LIMIT%203%3B%0A&properties=%7B"...
CONFLUENT
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
1 SELECT PAGEID FROM PAGEVIEWS EMIT CHANGES LIMIT 3;
2
Add query properties
auto.offset.reset
Earliest
+Add another field
Stop
Run query
Data structure
STREAM
Total messages
- -
Messages/sec
- -
Total message bytes
- -
Message fields
PAGEID
Filter by keyword
PAGEID
Page_21
Page_59
Page_67
ENG
22:54

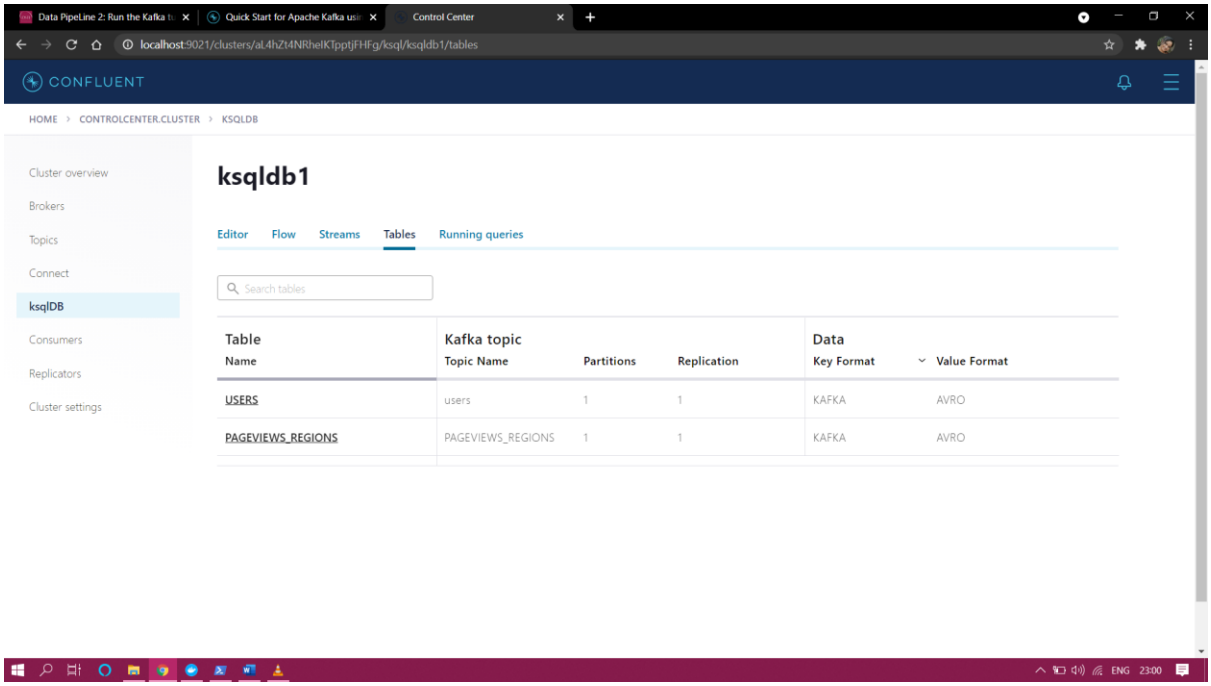

Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/editor?command=CREATE%20STREAM%20PAGEVIEWS_FEMALE%0A%20%20%20%20AS%20SELECT%20USERS.USERID%20AS%20USERI...
CONFLUENT
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
CREATE STREAM PAGEVIEWS_FEMALE
AS SELECT USERS.USERID AS USERID, PAGEID, REGIONID
FROM PAGEVIEWS LEFT JOIN USERS ON PAGEVIEWS.USERID = USERS.USERID
WHERE GENDER = 'FEMALE'
EMIT CHANGES;
PAGEVIEWS_FEMALE
USERS
Add query properties
auto.offset.reset
Earliest
+Add another field
Stop
Run query
{
"@type": "currentStatus",
"statementText": "CREATE STREAM PAGEVIEWS_FEMALE WITH (KAFKA_TOPIC='PAGEVIEWS_FEMALE', PARTITIONS=1, REPI
"commandId": "stream/`PAGEVIEWS_FEMALE`/create",
"commandStatus": {
"status": "SUCCESS",
"message": "Created query with ID CSAS_PAGEVIEWS_FEMALE_5",
"queryId": "CSAS_PAGEVIEWS_FEMALE_5"
},
"commandSequenceNumber": 6,
"warnings": []
}
ENG 22:56

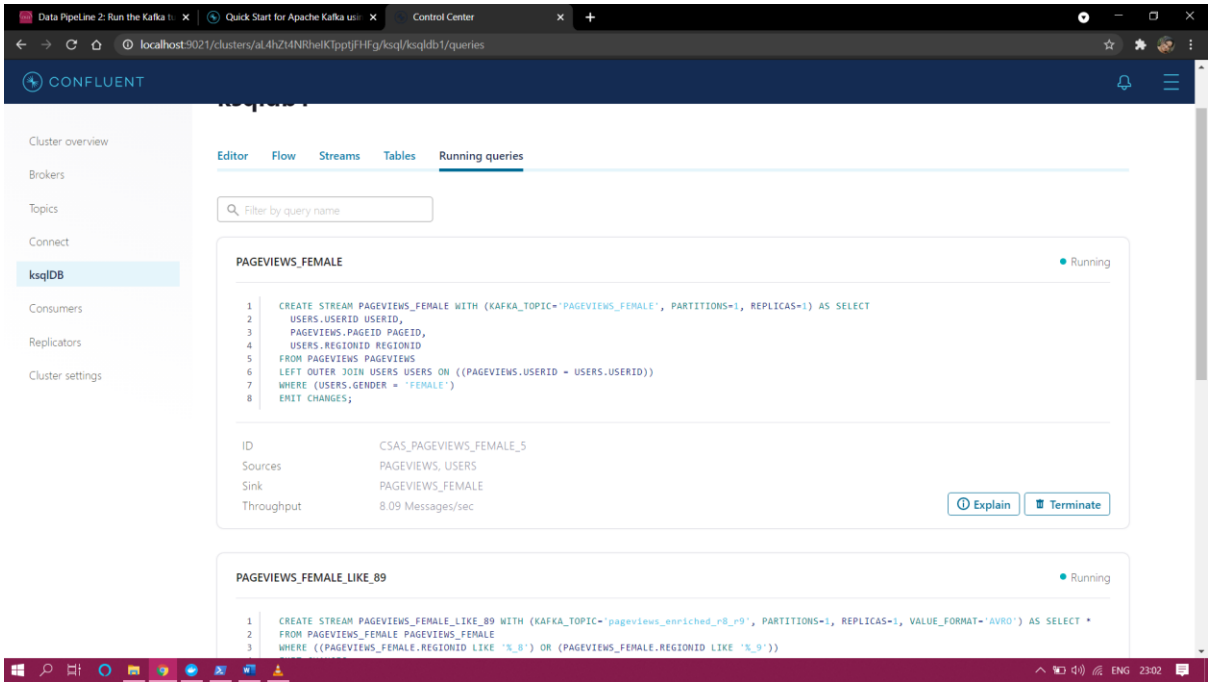

Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/streams
CONFLUENT
HOME > CONTROLCENTER.CLUSTER > KSQLDB
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
ksqldb1
Editor
Flow
Streams
Tables
Running queries
Search streams
Stream Name
Kafka topic Topic Name
Partitions
Replication
Data Key Format
Value Format
PAGEVIEWS_FEMALE
PAGEVIEWS_FE...
1
1
KAFKA
AVRO
PAGEVIEWS
pageviews
1
1
KAFKA
AVRO
KSQL_PROCESSING_LOG
default_ksql_pro...
1
1
KAFKA
JSON
ENG 22:57


Data PipeLine 2: Run the Kafka tutorial
a20.moodle.dsti.institute
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
CREATE STREAM PAGEVIEWS_FEMALE_LIKE_89
WITH (kafka_topic='pageviews_enriched_r8_r9', value_format='AVRO')
AS SELECT * FROM PAGEVIEWS_FEMALE
WHERE REGIONID LIKE '%_8' OR REGIONID LIKE '%_9'
EMIT CHANGES;
Add query properties
Stop
Run query
PAGEVIEWS
PAGEVIEWS_FEMALE
USERS
"@type": "currentStatus",
"statementText": "CREATE STREAM PAGEVIEWS_FEMALE_LIKE_89 WITH (KAFKA_TOPIC='pageviews_enriched_r8_r9',
"commandId": "stream/`PAGEVIEWS_FEMALE_LIKE_89`/create",
"commandStatus": {
"status": "SUCCESS",
"message": "Created query with ID CSAS_PAGEVIEWS_FEMALE_LIKE_89_7",
"queryId": "CSAS_PAGEVIEWS_FEMALE_LIKE_89_7"
},
"commandSequenceNumber": 8,
"warnings": []


CONFLUENT
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
ksqldb1
Editor
Flow
Streams
Tables
Running queries
Search streams
Stream
Name
Kafka topic
Topic Name
Partitions
Replication
Data
Key Format
Value Format
PAGEVIEWS_FEMALE
PAGEVIEWS_FE...
1
1
KAFKA
AVRO
PAGEVIEWS_FEMALE_LIKE_89
pageviews_enric...
1
1
KAFKA
AVRO
PAGEVIEWS
pageviews
1
1
KAFKA
AVRO
KSQL_PROCESSING_LOG
default_ksql_pro...
1
1
KAFKA
JSON


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/editor?command=CREATE%20TABLE%20PAGEVIEWS_REGIONS%0A%20%20%20AS%20SELECT%20GENDER%2C%20REGIONID%20...
CONFLUENT
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
CREATE TABLE PAGEVIEWS_REGIONS
AS SELECT GENDER, REGIONID , COUNT(*) AS NUMUSERS
FROM PAGEVIEWS LEFT JOIN USERS ON PAGEVIEWS.USERID = USERS.USERID
WINDOW TUMBLING (size 30 second)
GROUP BY GENDER, REGIONID
HAVING COUNT(*) > 1
EMIT CHANGES;
Add query properties
Stop
Run query
PAGEVIEWS
PAGEVIEWS_FEMALE
PAGEVIEWS_FEMALE_LIKE_89
PAGEVIEWS_REGIONS
USERS
{
"@type": "currentStatus",
"statementText": "CREATE TABLE PAGEVIEWS_REGIONS WITH (KAFKA_TOPIC='PAGEVIEWS_REGIONS', PARTITIONS=1, REI
"commandId": "table/`PAGEVIEWS_REGIONS`/create",
"commandStatus": {
"status": "SUCCESS",
"message": "Created query with ID CTAS_PAGEVIEWS_REGIONS_9",
"queryId": "CTAS_PAGEVIEWS_REGIONS_9"
},
"commandSequenceNumber": 10,
"warnings": []
}
ENG
22:59


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/tables
CONFLUENT
HOME
CONTROLCENTER.CLUSTER
KSQLDB
Cluster overview
Brokers
Topics
Connect
ksqlDB
Consumers
Replicators
Cluster settings
ksqldb1
Editor
Flow
Streams
Tables
Running queries
Search tables
Table
Name
Kafka topic
Topic Name
Partitions
Replication
Data
Key Format
Value Format
USERS
users
1
1
KAFKA
AVRO
PAGEVIEWS_REGIONS
PAGEVIEWS_REGIONS
1
1
KAFKA
AVRO
ENG
23:00


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/queries
CONFLUENT
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Topics
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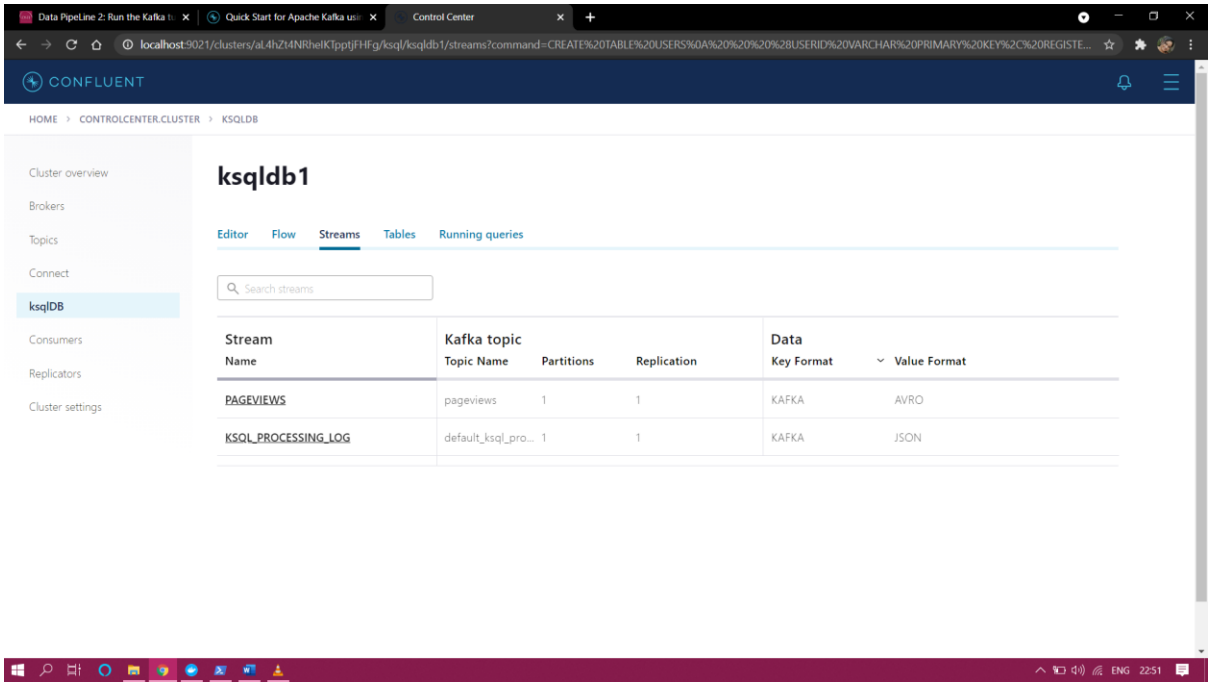
Running queries
Filter by query name
PAGEVIEWS_FEMALE
Running
CREATE STREAM PAGEVIEWS_FEMALE WITH (KAFKA_TOPIC='PAGEVIEWS_FEMALE', PARTITIONS=1, REPLICAS=1) AS SELECT
USERS.USERID USERID,
PAGEVIEWS.PAGEID PAGEID,
USERS.REGIONID REGIONID
FROM PAGEVIEWS PAGEVIEWS
LEFT OUTER JOIN USERS USERS ON ((PAGEVIEWS.USERID = USERS.USERID))
WHERE (USERS.GENDER = 'FEMALE')
EMIT CHANGES;
ID
CSAS_PAGEVIEWS_FEMALE_5
Sources
PAGEVIEWS, USERS
Sink
PAGEVIEWS_FEMALE
Throughput
8.09 Messages/sec
Explain
Terminate
PAGEVIEWS_FEMALE_LIKE_89
Running
CREATE STREAM PAGEVIEWS_FEMALE_LIKE_89 WITH (KAFKA_TOPIC='pageviews_enriched_r8_r9', PARTITIONS=1, REPLICAS=1, VALUE_FORMAT='AVRO') AS SELECT *
FROM PAGEVIEWS_FEMALE PAGEVIEWS_FEMALE
WHERE ((PAGEVIEWS_FEMALE.REGIONID LIKE '%_8') OR (PAGEVIEWS_FEMALE.REGIONID LIKE '%_9'))
ENG
23:02


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/streams?command=CREATE%20TABLE%20USERS%0A%20%20%20%28USERID%20VARCHAR%20PRIMARY%20KEY%2C%20REGISTE...
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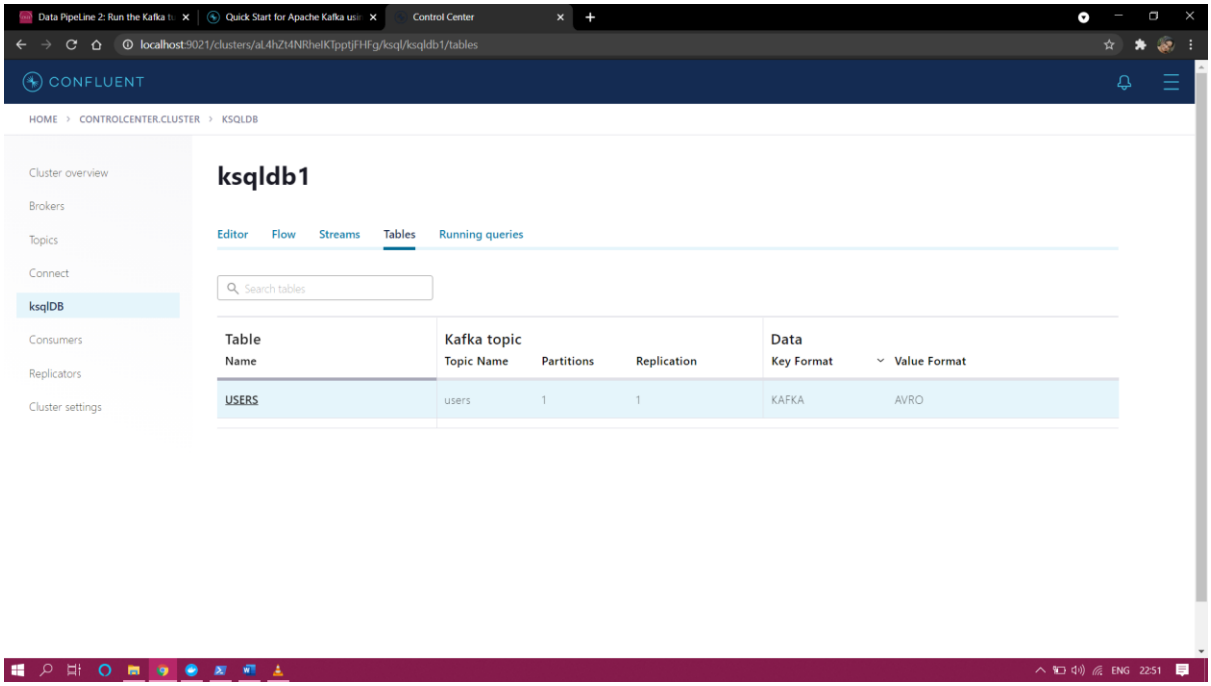
Stream
Name
Kafka topic
Topic Name
Partitions
Replication
Data
Key Format
Value Format
PAGEVIEWS
pageviews
1
1
KAFKA
AVRO
KSQL_PROCESSING_LOG
default_ksql_pro...
1
1
KAFKA
JSON
ENG
22:51


Data PipeLine 2: Run the Kafka t
Quick Start for Apache Kafka usi
Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/tables
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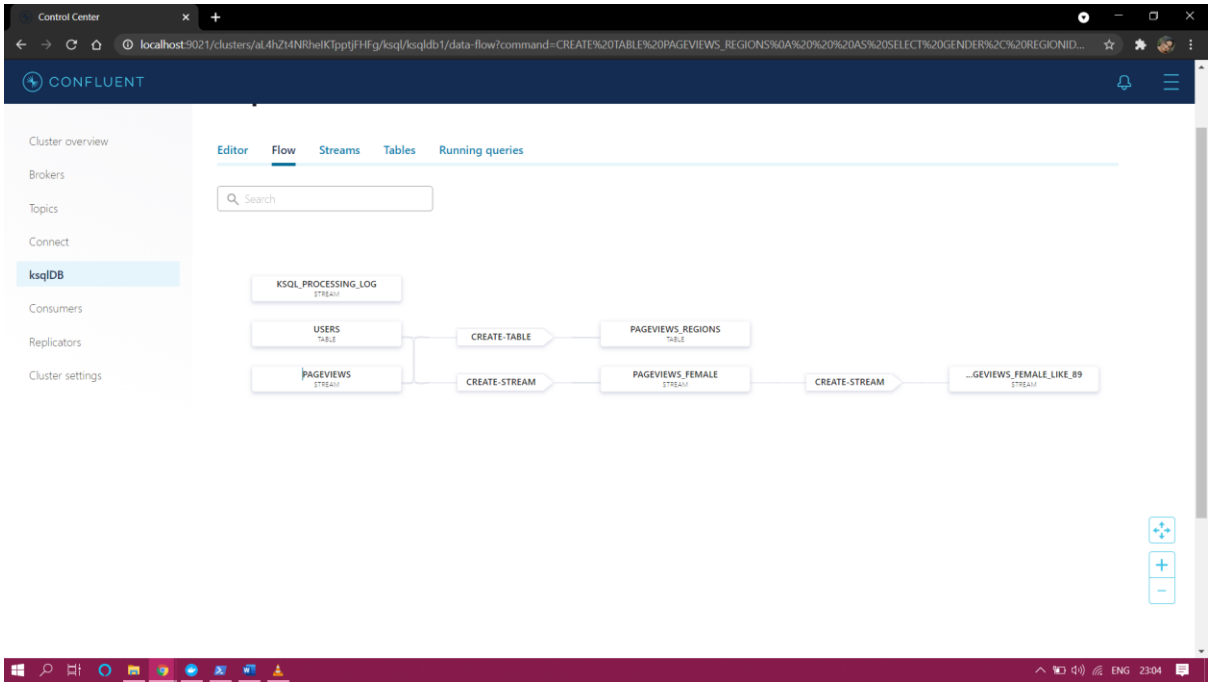
Search tables
Table
Name
Kafka topic
Topic Name
Partitions
Replication
Data
Key Format
Value Format
USERS
users
1
1
KAFKA
AVRO
ENG
22:51


Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/ksql/ksqldb1/data-flow?command=CREATE%20TABLE%20PAGEVIEWS_REGIONS%0A%20%20%20AS%20SELECT%20GENDER%2C%20REGIONID...
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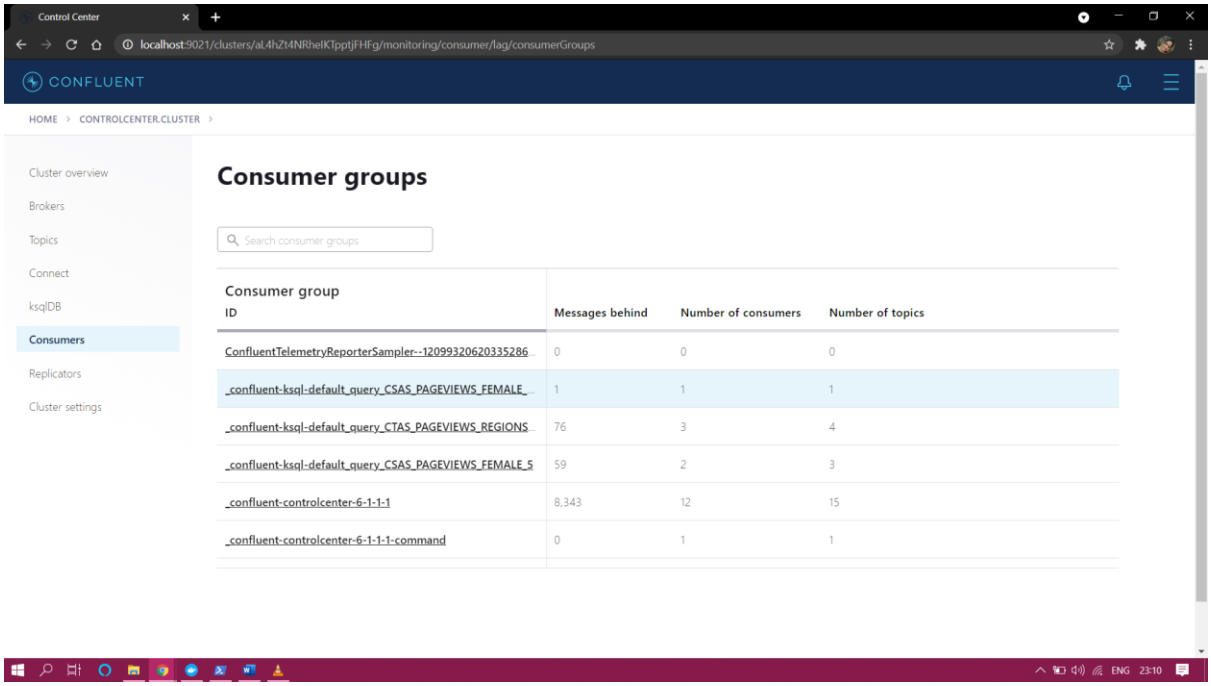
CREATE-TABLE
PAGEVIEWS_REGIONS
TABLE
PAGEVIEWS
STREAM
CREATE-STREAM
PAGEVIEWS_FEMALE
STREAM
CREATE-STREAM
...GEVIEWS_FEMALE_LIKE_89
STREAM
ENG
23:04


Control Center
localhost:9021/clusters/aL4hZt4NRhelKTpptjFHFg/monitoring/consumer/lag/consumerGroups
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Consumer groups
Search consumer groups
Consumer group ID
Messages behind
Number of consumers
Number of topics
ConfluentTelemetryReporterSampler--12099320620335286
0
0
0
_confluent-ksql-default_query_CSAS_PAGEVIEWS_FEMALE_
1
1
1
_confluent-ksql-default_query_CTAS_PAGEVIEWS_REGIONS
76
3
4
_confluent-ksql-default_query_CSAS_PAGEVIEWS_FEMALE_5
59
2
3
_confluent-controlcenter-6-1-1-1
8,343
12
15
_confluent-controlcenter-6-1-1-1-command
0
1
1
ENG
23:10