**Scenario 3**

**Problem Statement**

The client is unable to interact with the cluster using kafka-topics, kafka-console-producer or kafka-console-consumer using the super user bob(password - bob-secret) with some of the kakfa brokers as the bootstrap server. Only one of the kafka broker works as the bootstrap server.

The error message when using kafka2 or kafka3 as the bootstrap-server

[2023-07-26 13:20:58,720] ERROR [AdminClient clientId=adminclient-1] Connection to node 3 (kafka3/192.168.112.8:39092) failed authentication due to: Authentication failed: Invalid username or password (org.apache.kafka.clients.NetworkClient)

[2023-07-26 13:20:58,722] WARN [AdminClient clientId=adminclient-1] Metadata update failed due to authentication error (org.apache.kafka.clients.admin.internals.AdminMetadataManager)

org.apache.kafka.common.errors.SaslAuthenticationException: Authentication failed: Invalid username or password

Error while executing topic command : Authentication failed: Invalid username or password

[2023-07-26 13:20:58,907] ERROR org.apache.kafka.common.errors.SaslAuthenticationException: Authentication failed: Invalid username or password

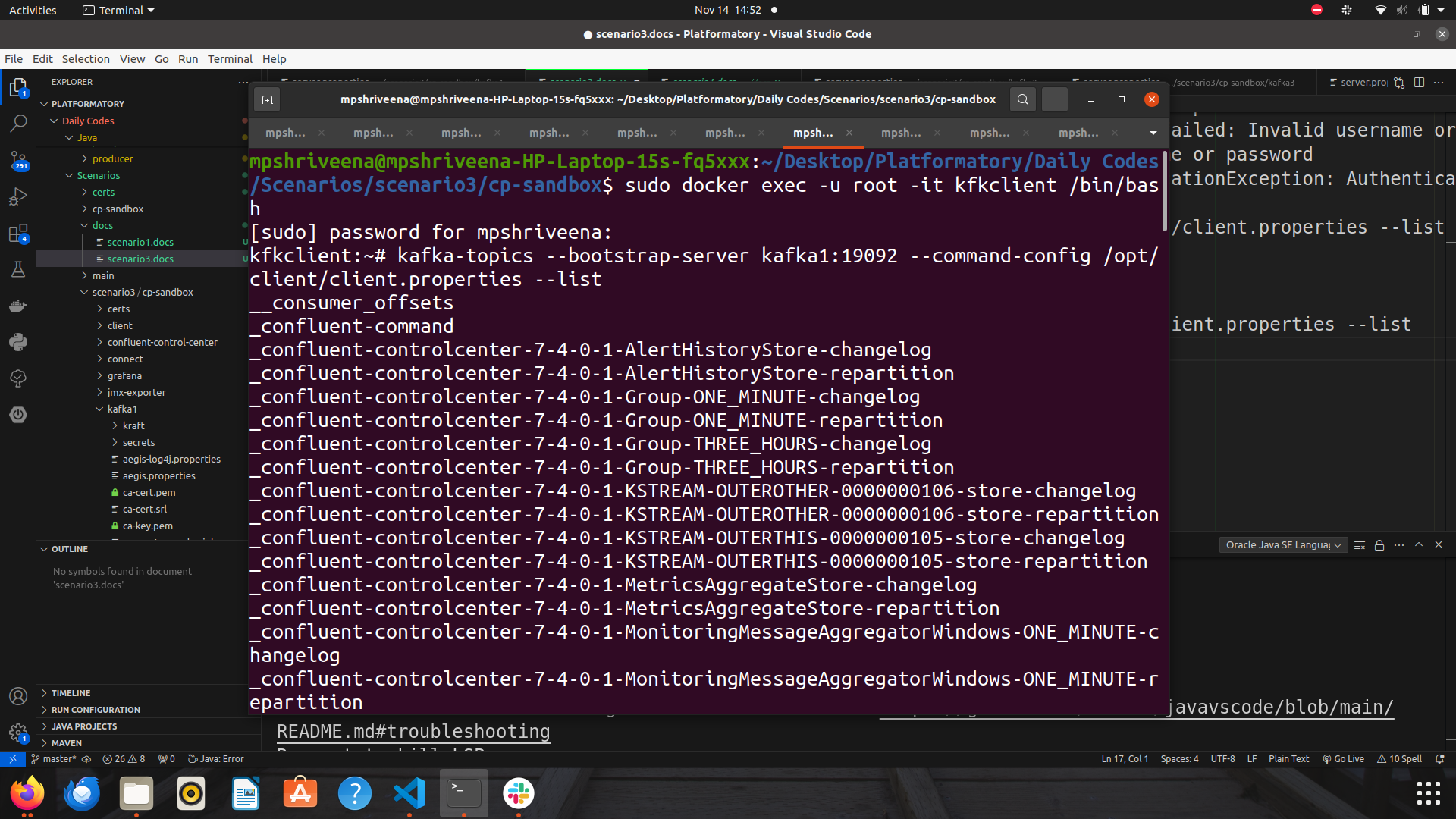
Commands ran on the kfkclient host

kafka-topics --bootstrap-server <broker>:<port> --command-config /opt/client/client.properties --list

**Observation**

The following command succeeds

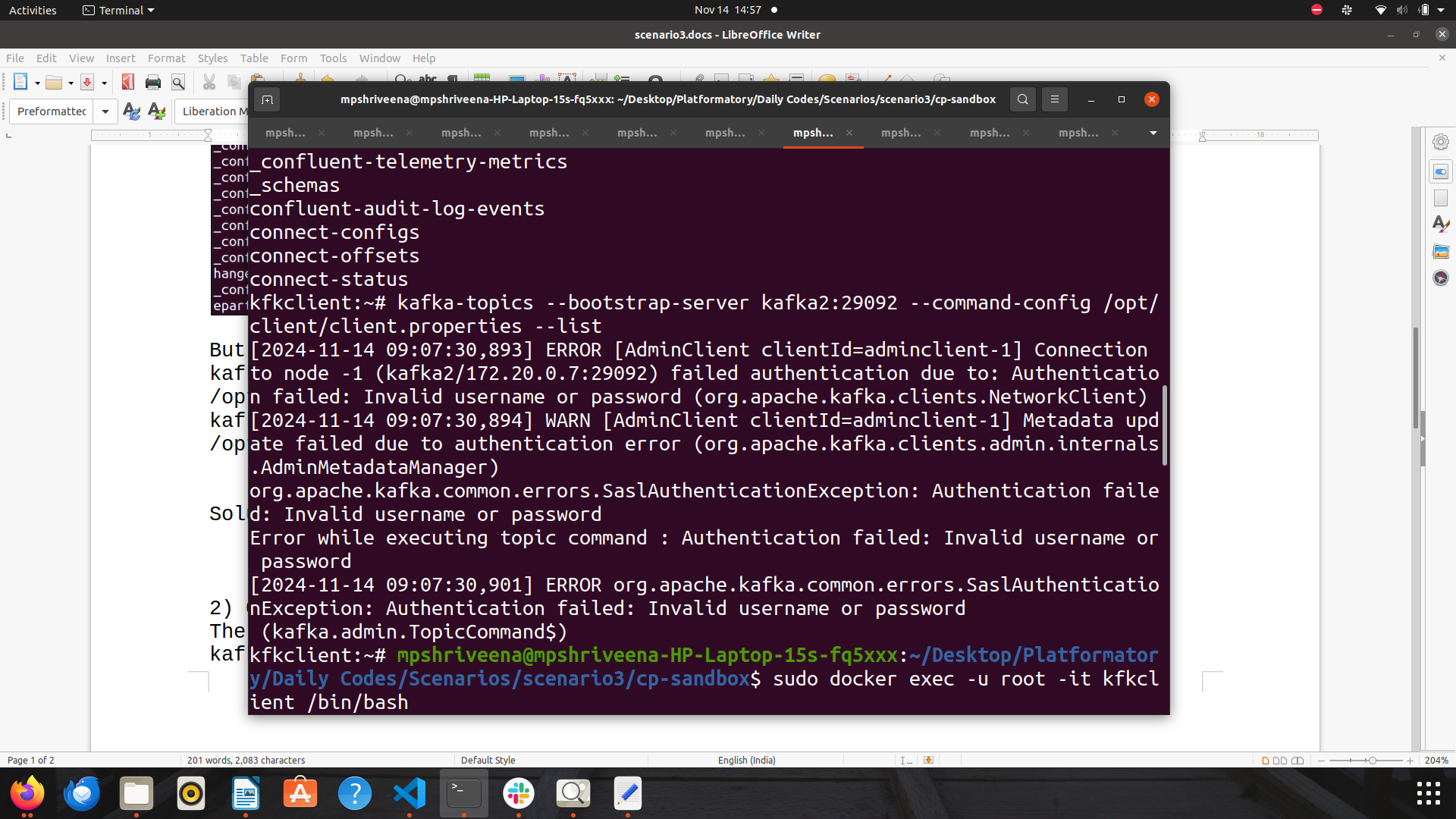
kafka-topics --bootstrap-server kafka1:19092 --command-config /opt/client/client.properties –list



But the following commands fail

kafka-topics --bootstrap-server kafka2:29092 --command-config /opt/client/client.properties –list

kafka-topics --bootstrap-server kafka3:39092 --command-config /opt/client/client.properties --list



**Root Cause Analysis**

The error says “Authentication failed: Invalid username or password”. That means probably the username or password mentioned in server.properties of kafka2 and kafka3 doesn’t match with the client.properties of kafka client. So these files are checked for mistakes.

i) The client.properties credentials are

username="bob" \

password="bob-secret";

ii) The credentials of clients in server.properties of kafka1 are

listener.name.client.plain.sasl.jaas.config=org.apache.kafka.common.security.plain.PlainLoginModule required \

username="admin" \

password="admin-secret" \

user\_admin="admin-secret" \

user\_bob="bob-secret" \

user\_alice="alice-secret" \

user\_kafkaclient1="kafkaclient1-secret";

iii) The credentials of clients in server.properties of kafka2 are

listener.name.client.plain.sasl.jaas.config=org.apache.kafka.common.security.plain.PlainLoginModule required \

username="admin" \

password="admin-secret" \

user\_admin="admin-secret" \

user\_bob="b0b-secret" \

user\_alice="alice-secret" \

user\_kafkaclient1="kafkaclient1-secret";

iv) The credentials of clients in server.properties of kafka3 are

listener.name.client.plain.sasl.jaas.config=org.apache.kafka.common.security.plain.PlainLoginModule required \

username="admin" \

password="admin-secret" \

user\_admin="admin-secret" \

user\_bob="b0b-secret" \

user\_alice="alice-secret" \

user\_kafkaclient1="kafkaclient1-secret";

*Note the passwords of bob in kafka2 and 3. They are written as b0b-secret instead of bob-secret because the client properties contains bob-secret*

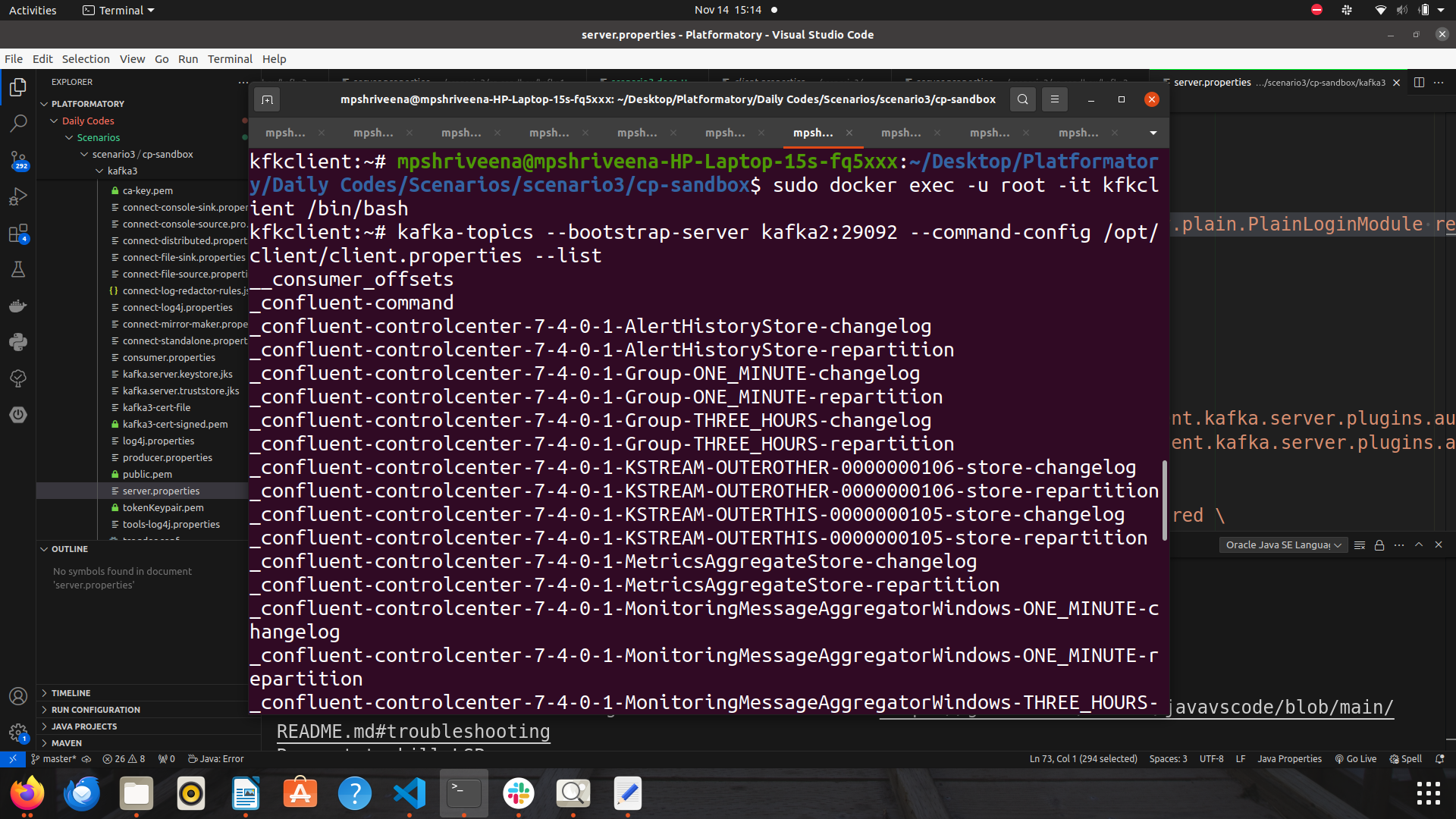
**Solution**

b0b-secret in password of bob in server.properties of kafka2 and kafka3 is changed to bob-secret

Now these two commands return the list of topics without fail.

kafka-topics --bootstrap-server kafka2:29092 --command-config /opt/client/client.properties –list

kafka-topics --bootstrap-server kafka3:39092 --command-config /opt/client/client.properties –list



**Conclusion**

Thus the authentication error that occurred when client tried to list the topic from kafka2 and kafka3 is resolved and topics are listed successfully.