

Assignment 4.2

Start Kafka using docker-compose and:

1. Create a topic.
2. List Kafka topics.
3. Inspect one of them to see the number of partitions.

First start the docker compose server

```
osamaabdulrazzak@all-MS-7D35:~/Desktop/Assignment 4.2$ docker compose down
osamaabdulrazzak@all-MS-7D35:~/Desktop/Assignment 4.2$ docker compose up -d
[+] Running 3/3
 ✓ Network assignment42_default    Created
 ✓ Container zookeeper             Started
 ✓ Container broker                Started
```

then create four topics with different number of partitions

```
osamaabdulrazzak@all-MS-7D35:~/Desktop/Assignment 4.2$ ./create_kafka_topic.sh events
Created topic Class-activity-event-0.
Created topic Class-activity-event-1.
Created topic Class-activity-event-2.
Created topic Class-activity-event-3.
osamaabdulrazzak@all-MS-7D35:~/Desktop/Assignment 4.2$
```

for observing the list of four server we type following command

docker compose exec broker kafka-topics --list --bootstrap-server broker:9092

```
osamaabdulrazzak@all-MS-7D35:~/Desktop/Assignment 4.2$ docker compose exec broker kafka-topics --list --bootstrap-server broker:9092
Class-activity-event-0
Class-activity-event-1
Class-activity-event-2
Class-activity-event-3
```

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to observing the partition we type following command

`docker compose exec broker kafka-topics --describe --bootstrap-server broker:9092`

```
osamaabdulrazzak@all-MS-7D35: ~/Desktop/Assignment 4.2$ docker compose exec broker kafka-topics --describe --bootstrap-server broker:9092
Topic: Class-activity-event-0 TopicId: 0wAUNZROsmSmX1B9naSXvA PartitionCount: 1 ReplicationFactor: 1 Configs:
Topic: Class-activity-event-0 Partition: 0 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-1 TopicId: Q3Je8XhKR5WPdaLWGXXRkg PartitionCount: 2 ReplicationFactor: 1 Configs:
Topic: Class-activity-event-1 Partition: 0 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-1 Partition: 1 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-2 TopicId: KmJACeH1SNarvFM-gVLSMA PartitionCount: 3 ReplicationFactor: 1 Configs:
Topic: Class-activity-event-2 Partition: 0 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-2 Partition: 1 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-2 Partition: 2 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 TopicId: XU4cPdn2RkuIenzY00tsCA PartitionCount: 5 ReplicationFactor: 1 Configs:
Topic: Class-activity-event-3 Partition: 0 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 1 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 2 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 3 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 4 Leader: 1 Replicas: 1 Isr: 1
```

then we inspect any one of partition

`docker compose exec broker kafka-topics --topic Class-activity-event-3 --describe --bootstrap-server broker:9092`

```
osamaabdulrazzak@all-MS-7D35: ~/Desktop/Assignment 4.2$ docker compose exec broker kafka-topics --topic Class-activity-event-3 --describe --bootstrap-server broker:9092
Topic: Class-activity-event-3 TopicId: XU4cPdn2RkuIenzY00tsCA PartitionCount: 5 ReplicationFactor: 1 Configs:
Topic: Class-activity-event-3 Partition: 0 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 1 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 2 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 3 Leader: 1 Replicas: 1 Isr: 1
Topic: Class-activity-event-3 Partition: 4 Leader: 1 Replicas: 1 Isr: 1
```

we also run those command in .sh file

```
1 #!/bin/bash
2
3 docker-compose exec broker kafka-topics --create --topic Class-activity-event-0 --bootstrap-server broker:9092
4
5 docker-compose exec broker kafka-topics --create --topic Class-activity-event-1 --bootstrap-server broker:9092 --partitions 2
6
7 docker-compose exec broker kafka-topics --create --topic Class-activity-event-2 --bootstrap-server broker:9092 --partitions 3
8
9 docker-compose exec broker kafka-topics --create --topic Class-activity-event-3 --bootstrap-server broker:9092 --partitions 5
10
11 docker compose exec broker kafka-topics --list --bootstrap-server broker:9092
12
13 docker compose exec broker kafka-topics --describe --bootstrap-server broker:9092
14
15 docker compose exec broker kafka-topics --topic Class-activity-event-3 --describe --bootstrap-server broker:9092
16
17
```

and for your reference we also provide .sh and and readme.md file