

Spring AU '21 – Kafka Introduction – Morning Session

Name: Sheik Abudhahir K

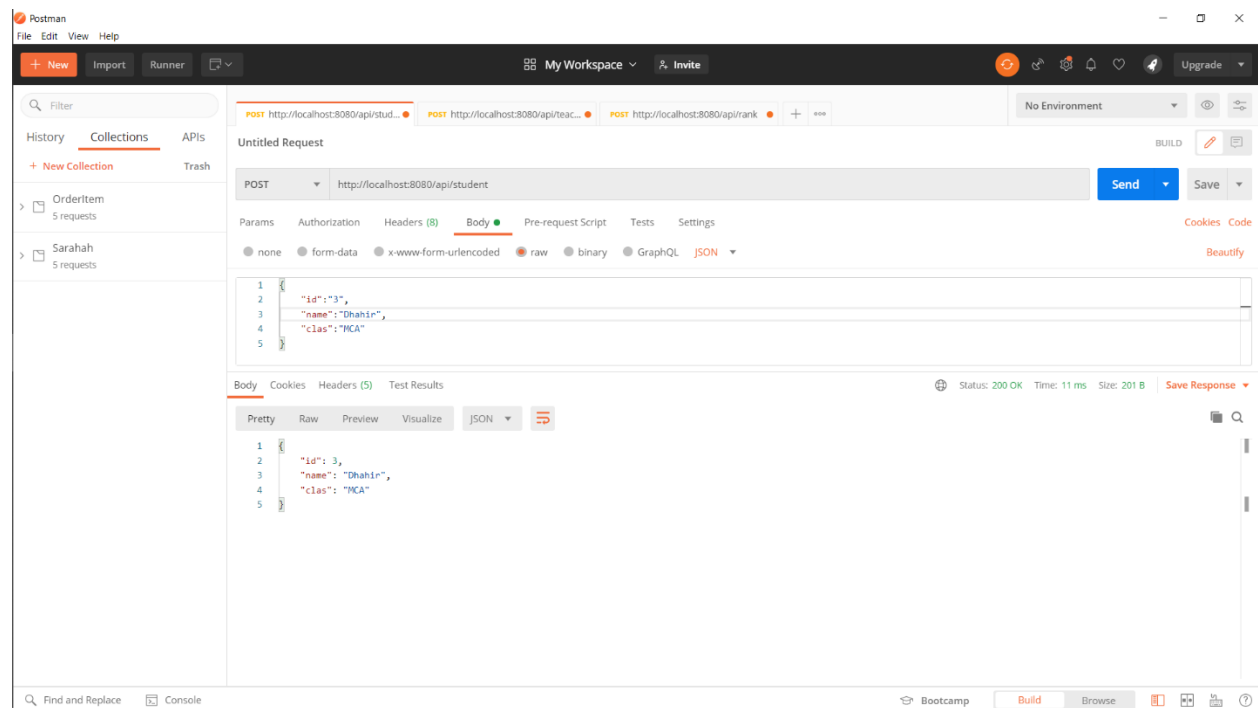
Date: 26/01/2021

We have to create 3 topics and send data to each topics through eclipse

Topics in consumer

```
2021-01-31 14:25:25.432 INFO 24580 --- [main] c.s.main.SpringKafkaConsumerApplication : Started SpringKafkaConsumerApplication in 1.912 seconds (JVM running for 2.631)
2021-01-31 14:25:26.962 INFO 24580 --- [ntainer#1-0-C-1] org.apache.kafka.clients.Metadata : [Consumer clientId=consumer-Student-Teacher-Group-3, groupId=Student-Teacher-Group] Clus
2021-01-31 14:25:26.962 INFO 24580 --- [ntainer#0-0-C-1] org.apache.kafka.clients.Metadata : [Consumer clientId=consumer-Student-Teacher-Group-2, groupId=Student-Teacher-Group] Clus
2021-01-31 14:25:26.962 INFO 24580 --- [ntainer#2-0-C-1] org.apache.kafka.clients.Metadata : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] Clus
2021-01-31 14:25:26.963 INFO 24580 --- [ntainer#2-0-C-1] o.a.k.c.c.internals.AbstractCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] Disc
2021-01-31 14:25:26.963 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.AbstractCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, groupId=Student-Teacher-Group] Disc
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2021-01-31 14:25:27.048 INFO 24580 --- [ntainer#1-0-C-1] o.a.k.c.c.internals.AbstractCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-3, groupId=Student-Teacher-Group] Join
2021-01-31 14:25:27.048 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.AbstractCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, groupId=Student-Teacher-Group] (Re-
2021-01-31 14:25:27.048 INFO 24580 --- [ntainer#2-0-C-1] o.a.k.c.c.internals.AbstractCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] (Re-
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2021-01-31 14:25:27.049 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.AbstractCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] (Re-
2021-01-31 14:25:27.087 INFO 24580 --- [ntainer#2-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, groupId=Student-Teacher-Group] Fini
2021-01-31 14:25:27.130 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] Succ
2021-01-31 14:25:27.130 INFO 24580 --- [ntainer#1-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-3, groupId=Student-Teacher-Group] Succ
2021-01-31 14:25:27.131 INFO 24580 --- [ntainer#2-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, groupId=Student-Teacher-Group] Noti
2021-01-31 14:25:27.131 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] Noti
2021-01-31 14:25:27.131 INFO 24580 --- [ntainer#1-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-3, groupId=Student-Teacher-Group] Succ
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2021-01-31 14:25:27.134 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] Addi
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2021-01-31 14:25:27.149 INFO 24580 --- [ntainer#2-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, groupId=Student-Teacher-Group] Addi
2021-01-31 14:25:27.149 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, groupId=Student-Teacher-Group] Sett
2021-01-31 14:25:27.149 INFO 24580 --- [ntainer#1-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-3, groupId=Student-Teacher-Group] Sett
2021-01-31 14:25:27.150 INFO 24580 --- [ntainer#2-0-C-1] o.s.k.l.KafkaMessageListenerContainer : Student-Teacher-Group: partitions assigned: [Teacher-0]
2021-01-31 14:25:27.150 INFO 24580 --- [ntainer#0-0-C-1] o.s.k.l.KafkaMessageListenerContainer : Student-Teacher-Group: partitions assigned: [Teacher-0]
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2021-01-31 14:25:27.150 INFO 24580 --- [ntainer#2-0-C-1] o.s.k.l.KafkaMessageListenerContainer : Student-Teacher-Group: partitions assigned: [Student-0]
```

Student api call in producer side



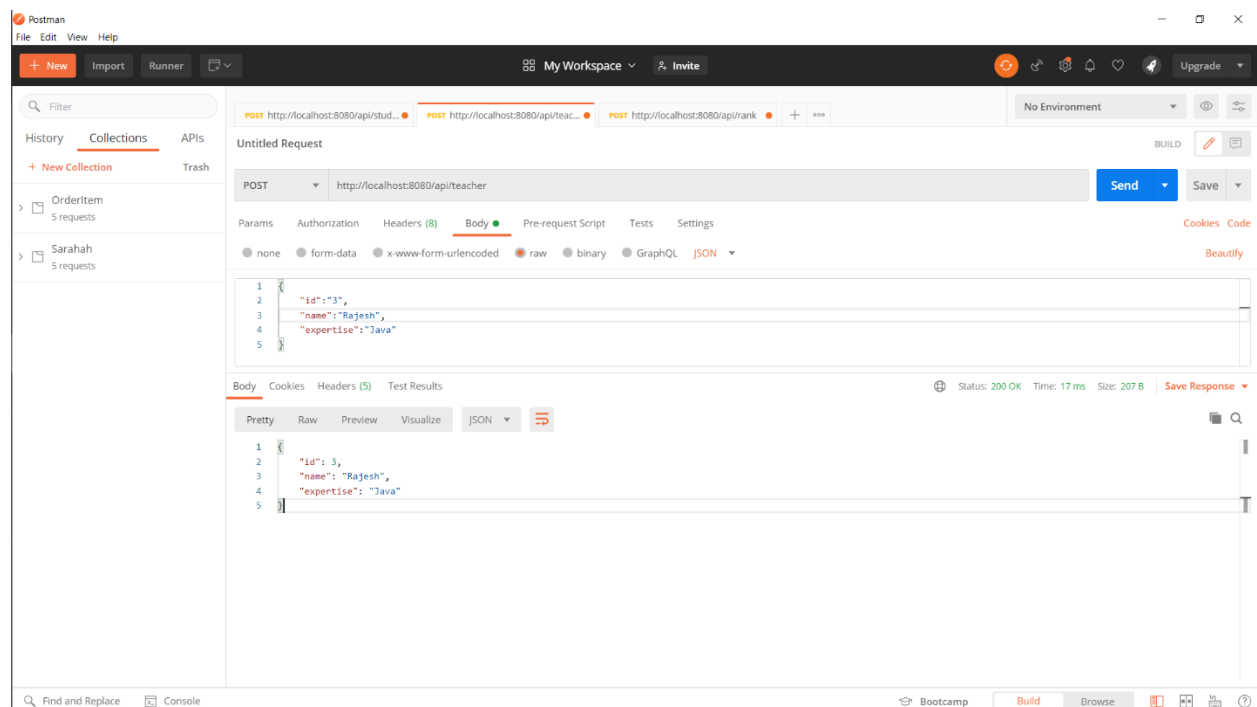
Producer console:

```
2021-01-31 14:27:33.070 INFO 13064 --- [nio-8080-exec-1] o.a.kafka.common.utils.AppInfoParser : Kafka version: 2.6.0
2021-01-31 14:27:33.073 INFO 13064 --- [nio-8080-exec-1] o.a.kafka.common.utils.AppInfoParser : Kafka commitId: 62abe01bee039651
2021-01-31 14:27:33.073 INFO 13064 --- [nio-8080-exec-1] o.a.kafka.common.utils.AppInfoParser : Kafka startTimeMs: 1612083453063
2021-01-31 14:27:33.672 INFO 13064 --- [ad | producer-1] org.apache.kafka.clients.Metadata : [Producer clientId=producer-1] Cluster ID: ODih2ZnBnS6yHQbFYt1klg
Producer send message in the topic of student
Producer send message in the topic of student
```

Consumer console:

```
2021-01-31 14:25:27.134 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, group:
2021-01-31 14:25:27.149 INFO 24580 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-2, group:
2021-01-31 14:25:27.149 INFO 24580 --- [ntainer#2-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-1, group:
2021-01-31 14:25:27.149 INFO 24580 --- [ntainer#1-0-C-1] o.a.k.c.c.internals.ConsumerCoordinator : [Consumer clientId=consumer-Student-Teacher-Group-3, group:
2021-01-31 14:25:27.150 INFO 24580 --- [ntainer#0-0-C-1] o.s.k.l.KafkaMessageListenerContainer : Student-Teacher-Group: partitions assigned: [Rank-0]
2021-01-31 14:25:27.150 INFO 24580 --- [ntainer#1-0-C-1] o.s.k.l.KafkaMessageListenerContainer : Student-Teacher-Group: partitions assigned: [Teacher-0]
2021-01-31 14:25:27.150 INFO 24580 --- [ntainer#2-0-C-1] o.s.k.l.KafkaMessageListenerContainer : Student-Teacher-Group: partitions assigned: [Student-0]
Student Topic
{"id":1,"name":"Abu","clas":"MCA"}
Student Topic
{"id":2,"name":"Sheik","clas":"MCA"}
Student Topic
{"id":3,"name":"Dhahir","clas":"MCA"}
```

Api call for teacher from producer side



Producer console:

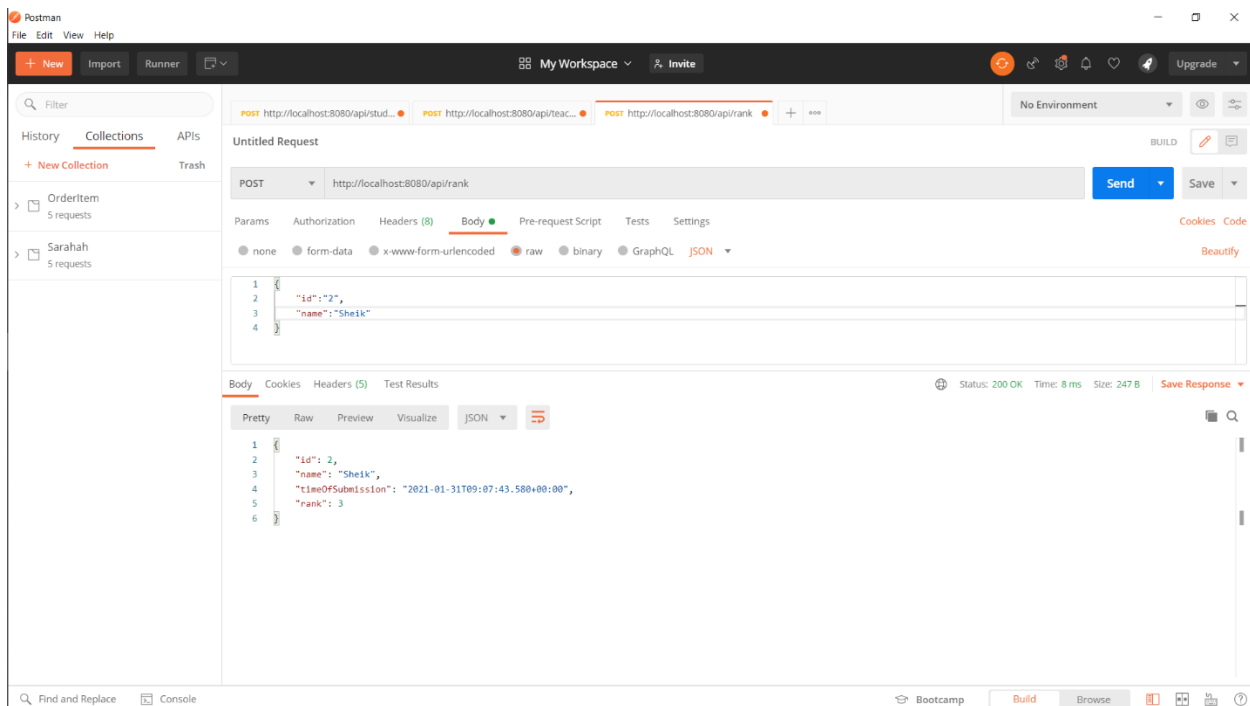
```
transactional.id = null
value.serializer = class org.springframework.kafka.support.serializer.JsonSerializer

2021-01-31 14:33:15.117 INFO 15896 --- [nio-8080-exec-2] o.a.kafka.common.utils.AppInfoParser : Kafka version: 2.6.0
2021-01-31 14:33:15.122 INFO 15896 --- [nio-8080-exec-2] o.a.kafka.common.utils.AppInfoParser : Kafka commitId: 62abe01bee039651
2021-01-31 14:33:15.122 INFO 15896 --- [nio-8080-exec-2] o.a.kafka.common.utils.AppInfoParser : Kafka startTimeMs: 1612083795068
2021-01-31 14:33:15.702 INFO 15896 --- [ad | producer-1] org.apache.kafka.clients.Metadata : [Producer clientId=producer-1] Cluster ID: ODih2ZnBnS6yHQbFYt1klg
Producer send message in the topic of teacher
Producer send message in the topic of teacher
```

Consumer console:

```
2021-01-31 14:32:53.159 INFO 18144 --- [ntainer#1-0-C-1]
Teacher Topic
{"id":1,"name":"Ramesh","expertise":"C++"}
Teacher Topic
{"id":2,"name":"Suresh","expertise":"Java"}
Teacher Topic
{"id":3,"name":"Rajesh","expertise":"Java"}
```

Api call for rank from producer side:



Produce console:

```
2021-01-31 14:37:16.700 INFO 25720 --- [nio-8080-exec-3] o.a.kafka.common.utils.AppInfoParser : Kafka version: 2.6.0
2021-01-31 14:37:16.702 INFO 25720 --- [nio-8080-exec-3] o.a.kafka.common.utils.AppInfoParser : Kafka commitId: 62abe01bee039651
2021-01-31 14:37:16.702 INFO 25720 --- [nio-8080-exec-3] o.a.kafka.common.utils.AppInfoParser : Kafka startMs: 1612084036698
2021-01-31 14:37:17.845 INFO 25720 --- [ad | producer-1] org.apache.kafka.clients.Metadata : [Producer clientId=producer-1] Cluster ID: 0DiH2zBnS6yTHQbFyt1k1g
Producer send message in the topic of rank
Producer send message in the topic of rank
```

Consumer console: Depends upon time rank could be assigned

```
2021-01-31 14:37:06.455 INFO 25012 --- [ntainer#0-0-C-1] o.s.k.l.KafkaMessageListenerContainer : [Consumer clientId=consumer-1, groupId=student-teacher-group-2, groupInstanceId=25012] Student-Teacher-Group: partitions assigned: [Teacher-0]
2021-01-31 14:37:06.455 INFO 25012 --- [ntainer#2-0-C-1] o.s.k.l.KafkaMessageListenerContainer : [Consumer clientId=consumer-1, groupId=student-teacher-group-2, groupInstanceId=25012] Student-Teacher-Group: partitions assigned: [Student-0]
2021-01-31 14:37:06.455 INFO 25012 --- [ntainer#1-0-C-1] o.s.k.l.KafkaMessageListenerContainer : [Consumer clientId=consumer-1, groupId=student-teacher-group-2, groupInstanceId=25012] Student-Teacher-Group: partitions assigned: [Rank-0]
Rank Topic
{"id":3,"name":"Dhahin","timeOfSubmission":1612084036612,"rank":1}
Rank Topic
{"id":1,"name":"Abu","timeOfSubmission":1612084048977,"rank":2}
Rank Topic
{"id":2,"name":"Sheik","timeOfSubmission":1612084063580,"rank":3}
```