Kafka Assignment

Maithreyan K

School processing system

Student-data(ordering is not important), teachers-data(ordering is not important), rank-assignment(ordering is important)

Topic - Student

Student- data: process and save the data in DB

(Student name, id, class)

Topic - Teacher

Teacher-data: process and save the data in DB

(teachers name, id and what is expertise)

Topic - Rank

Rank-assignment: This want to give rank to the student according to the time of their assignment submission.

(student Id, name and the time of submission)

Starting Zookeeper-server

```
D:\kafka_2.12-2.6.1>zookeeper-server-start.bat config\zookeeper.properties

[2021-01-31 20:97:51,527] INFO Reading configuration from: config\zookeeper.properties (org.apache.zookeeper.server.quorum.QuorumPeerConfig)

[2021-01-31 20:97:51,527] IMFO Reading configuration from: config\zookeeper.properties is relative. Prepend .\ to indicate that you're sure! (org.apache.zookeeper.server.quorum.QuorumPeerConfig)

[2021-01-31 20:97:51,567] MARN \tmp\zookeeper is relative. Prepend .\ to indicate that you're sure! (org.apache.zookeeper.server.quorum.QuorumPeerConfig)

[2021-01-31 20:97:51,567] IMFO ClientPortAddress is 0.0.0.0:2181 (org.apache.zookeeper.server.quorum.QuorumPeerConfig)

[2021-01-31 20:97:51,574] INFO SecureClientPort is not set (org.apache.zookeeper.server.quorum.QuorumPeerConfig)

[2021-01-31 20:97:51,608] INFO autopurge.purgeInterval set to 3 (org.apache.zookeeper.server.duorum.quorumPeerConfig)

[2021-01-31 20:97:51,608] INFO autopurge.purgeInterval set to 6 (org.apache.zookeeper.server.DatadirCleanupManager)

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Starting Kafka-server

```
D:\kafka 2.12-2.6.1>kafka-server-start.bat config\server.properties
[2021-01-31 20:08:17,988] IMFO Registered kafka:type-kafka.togdjcontroller MBean (kafka.utils.togdjcontrollerRegistration$)
[2021-01-31 20:08:18,43] IMFO Setting -D jdk.tls.rejectClieutInitiatedRenegotiation=true to disable client-initiated TLS renegotiation (org.apache.zookeeper.common.X509Util)
[2021-01-31 20:08:18,555] IMFO starting (kafka.server.KafkaServer)
[2021-01-31 20:08:18,557] IMFO Connecting to zookeeper on localhost:2131 (kafka.server.KafkaServer)
[2021-01-31 20:08:18,598] IMFO [200keeperClient kafka server] Initializing a new session to localhost:2181. (kafka.zookeeper.Zookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeeper.Cookeepe
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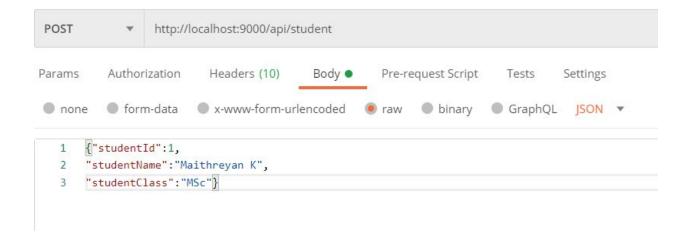
Controller

```
@RestController
@RequestMapping(value = "/api")
public class KafkaProducerController {
    private final KafKaProducerService producerService;
    private static int rank = 0;

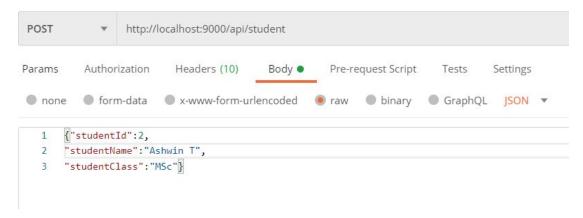
    @Autowired
    public KafkaProducerController(KafKaProducerService producerService) { this.producerService = producerService; }

    @PostMapping(value = "/student")
    public void createStudent(@RequestBody Student student) { this.producerService.saveStudent(student); }
    @PostMapping(value = "/teacher")
    public void createStudent(@RequestBody Teacher teacher) { this.producerService.saveTeacher(teacher); }
    @PostMapping(value = "/assignment")
    public void createStudent(@RequestBody Assignment assignment) {
        assignment.setSubmissionDate(new Date());
        assignment.setRank(++this.rank);
        this.producerService.saveAssignment(assignment);
    }
}
```

Student1



Student 2



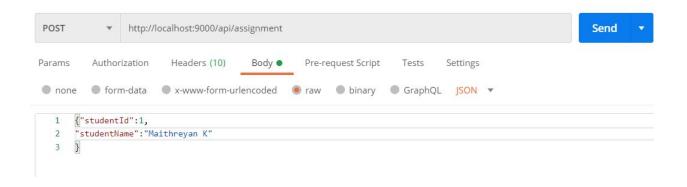
Teacher



Assignment 1



Assignment 2



Rank

```
fka.common.utils.AppInfoParser : Kafka version: 2.5.0
fka.common.utils.AppInfoParser : Kafka commitId: 665652712bBb9f84
fka.common.utils.AppInfoParser : Kafka commitId: 665652712bBb9f84
fka.common.utils.AppInfoParser : Kafka startTimeMs: 1612104919258
ache.kafka.clients.Metadata : [Producer clientId=producer-1] Cluster ID: zLenTAXASWGxgC6NU9KLLW
demo.service.KafkAConsumerService : Student created -> Student(studentId=1, studentName='Maithreyan K', studentClass='MSC'}
demo.service.KafkAConsumerService : Student created -> Student(studentId=2, studentName='Ashwin T', studentClass='MSC'}
demo.service.KafkAConsumerService : Teacher created -> Student(studentId=2, studentName='Yahwin T', studentClass='MSC'}
demo.service.KafkAConsumerService : Teacher created -> Teacher(teacherId=1, teacherName='Vinod', teacherDesig='Computer Science'}
demo.service.KafkAConsumerService : Assignment created -> Teacher(studentId=2, studentName='Ashwin T', submissionDate=Sun Jan 31 20:31:17 IST 2021, rank=1}
demo.service.KafkAConsumerService : Assignment created -> Assignment(studentId=2, studentName='Ashwin T', submissionDate=Sun Jan 31 20:31:17 IST 2021, rank=2}
demo.service.KafkAConsumerService : Assignment created -> Assignment fstudentId=1, studentName='Maithreyan K', submissionDate=Sun Jan 31 20:31:59 IST 2021, rank=2}
demo.service.KafkAConsumerService : Assignment created -> Assignment fstudentId=1, studentName='Maithreyan K', submissionDate=Sun Jan 31 20:31:59 IST 2021, rank=2}
```

Kafka Server Stopped

```
D:\>kafka-server-stop.bat
Deleting instance \\DESKTOP-EDOST2V\ROOT\CIMV2:Win32_Process.Handle="2492"
Instance deletion successful.
```

Zookeeper Server Stopped

```
D:\>zookeeper-server-stop.bat
Deleting instance \\DESKTOP-EDOST2V\ROOT\CIMV2:Win32_Process.Handle="7036"
Instance deletion successful.
```