

## Rudraksh Chourey Assignment 5

### Producer Consumer :

```
C:\kafka_2.12-3.9.0>kafka-topics.bat --create --topic test --bootstrap-s
erver localhost:9092 -- partitions 1 -- replication-factor 1

C:\kafka_2.12-3.9.0>kafka-console-producer.bat --topic test --bootstrap-
server localhost:9092
>hello sending form consumer
>

Microsoft Windows [Version 10.0.26100.6584]
(c) Microsoft Corporation. All rights reserved.

C:\kafka_2.12-3.9.0>kafka-console-consumer.bat --topic test --from-begin
ning --bootstrap-server localhost:9092

fh
hello sending form consumer
|
```

### Order Kafka Consumer:

```
KaafkaConsumer.java  KaafkaControler.java  application.yml
1 package com.example.productservice;
2
3 import org.springframework.kafka.annotation.KafkaListener;
4 import org.springframework.stereotype.Service;
5 @Service
6 public class KaafkaConsumer {
7     @KafkaListener(topics = "test", groupId = "hello-group2")
8     public void listen(String message) {
9         System.out.println("Product service..Received message: " + message);
10    }
11 }
```

### Order Kafka Producer:

```
KaafkaConsumer.java  KaafkaControler.java  application.yml  KafkaProducer.java
1 package com.example.orderservice.service;
2
3 import org.springframework.kafka.core.KafkaTemplate;
4 import org.springframework.stereotype.Service;
5 @Service
6 public class KafkaProducer {
7     private final KafkaTemplate<String, String> kafkaTemplate;
8     public KafkaProducer(KafkaTemplate<String, String> kafkaTemplate) {
9         this.kafkaTemplate = kafkaTemplate;
10    }
11    public void sendMessage(String message) {
12        kafkaTemplate.send("test", message);
13        System.out.println("Sent message: " + message);
14    }
15 }
```

### Product Kafka Consumer:

```
KaafkaConsumer.java  KaafkaControler.java  application.yml  KafkaProducer.java
1 package com.example.productservice;
2
3 import org.springframework.kafka.annotation.KafkaListener;
4 import org.springframework.stereotype.Service;
5 @Service
6 public class KaafkaConsumer {
7     @KafkaListener(topics = "test", groupId = "hello-group2")
8     public void listen(String message) {
9         System.out.println("Product service..Received message: " + message);
10    }
11 }
```

### Order Kafka Controller:

```
package com.example.orderservice.controller;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RequestParam;
import org.springframework.web.bind.annotation.RestController;

import com.example.orderservice.service.KafkaProducer;
@RestController
public class KaafkaControler {
    private final KafkaProducer producer;
    public KaafkaControler(KafkaProducer producer) {
        this.producer = producer;
    }
    @GetMapping("/send")
    public String sendMessage(@RequestParam String msg) {
        producer.sendMessage(msg);
        return "Message sent: " + msg;
    }
}
```

## Output:

The screenshot shows a REST client interface with a list of GET requests at the top. The selected request is `http://localhost:8080/api/admin`. Below it, a new GET request is configured with the URL `http://localhost:8083/send?msg=helloooooo`. The 'Query Params' section shows a table with one parameter: `msg` with value `helloooooo`. The 'Body' tab is active, showing the response: `1 Message sent: helloooooo`. The status bar indicates `Status: 200 OK`, `Time: 132 ms`, and `Size: 188 B`.

Key	Value
<input checked="" type="checkbox"/> msg	helloooooo
Key	Value

1 Message sent: helloooooo

The screenshot shows a Java IDE console with the following log output:

```
product-service - ProductServiceApplication [Spring Boot App] C:\Users\Rudraksh.Chourey\Downloads\sts\sts-4
2025-10-08 17:54:17.820 INFO 12116 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.Cons
2025-10-08 17:54:17.828 INFO 12116 --- [ntainer#0-0-C-1] o.a.k.c.c.internals.Subs
2025-10-08 17:54:17.829 INFO 12116 --- [ntainer#0-0-C-1] o.s.k.l.KafkaMessageList
Product service..Received message:
Product service..Received message:
Product service..Received message:
Product service..Received message: fh
Product service..Received message: hello sending form consumer
2025-10-08 17:56:11.246 INFO 12116 --- [nio-8082-exec-2] o.a.c.c.C.[Tomcat].[loca
2025-10-08 17:56:11.246 INFO 12116 --- [nio-8082-exec-2] o.s.web.servlet.Dispatch
2025-10-08 17:56:11.246 INFO 12116 --- [nio-8082-exec-2] o.s.web.servlet.Dispatch
Product service..Received message: helloooooo
2025-10-08 18:09:03.861 INFO 12116 --- [ntainer#0-0-C-1] org.apache.kafka.clients
2025-10-08 18:09:03.877 INFO 12116 --- [ntainer#0-0-C-1] org.apache.kafka.clients
2025-10-08 18:09:03.880 INFO 12116 --- [ntainer#0-0-C-1] org.apache.kafka.clients
2025-10-08 18:09:03.881 INFO 12116 --- [ | hello-group2] org.apache.kafka.clients
2025-10-08 18:09:03.882 INFO 12116 --- [ | hello-group2] o.a.k.c.c.internals.Cons
2025-10-08 18:09:03.891 INFO 12116 --- [ntainer#0-0-C-1] o.a.kafka.clients.FetchS
```