

Project Setup in Local:

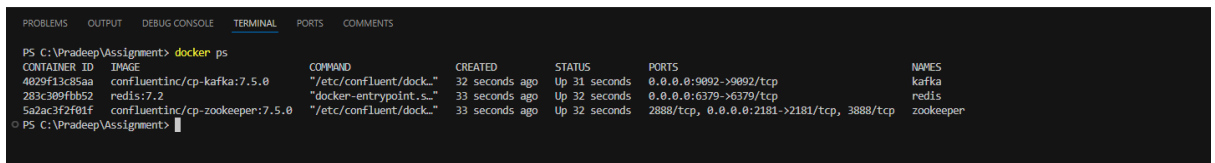
Setting Up Kafka, Redis, and Zookeeper with Docker Compose and Starting the Server

Prerequisite:

- Ensure **Docker** is installed and running on your local machine.

Steps to Set Up and Verify Kafka, Redis, and Zookeeper:

- Navigate to the project directory if not already there.
- Start Services with Docker Compose:** Open a terminal and execute the following command to bring up Kafka, Redis, and Zookeeper as background services: **docker-compose up -d**
- Verify Services are Running:** Check the status of the services by running: **docker ps**



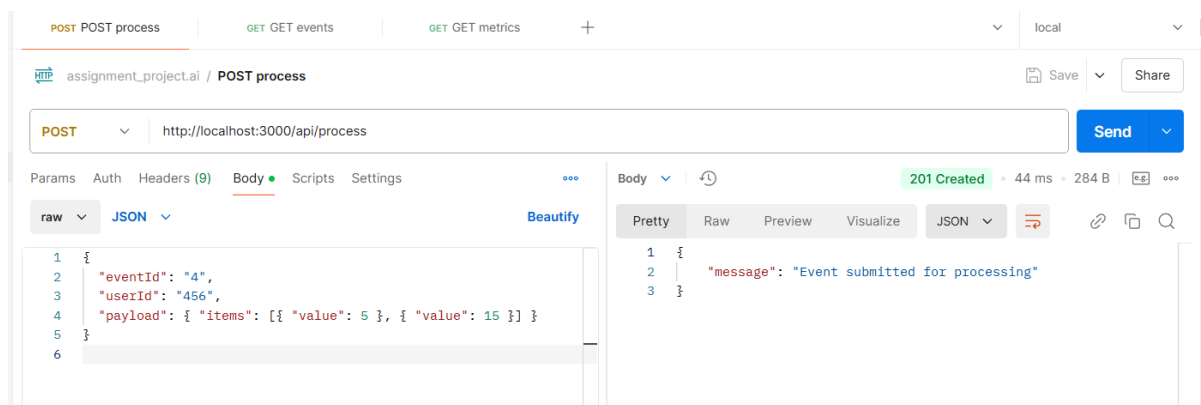
```
PS C:\Pradeep\Assignment> docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS
4829f13c85aa   confluentinc/cp-kafka:7.5.0         "/etc/confluent/dock..." 32 seconds ago Up 31 seconds 0.0.0.0:9092->9092/tcp
283c309fbb52   redis:7.2                            "docker-entrypoint.s..." 33 seconds ago Up 32 seconds 0.0.0.0:6379->6379/tcp
5a2ac3f2f01f   confluentinc/cp-zookeeper:7.5.0     "/etc/confluent/dock..." 33 seconds ago Up 32 seconds 2888/tcp, 0.0.0.0:2181->2181/tcp, 3888/tcp
PS C:\Pradeep\Assignment>
```

- npm install if node_modules not present
- Start the server by running: **node src/server.js**

POST: <http://localhost:3000/api/process>

BODY:

```
{
  "eventId": "4",
  "userId": "456",
  "payload": { "items": [{ "value": 5 }, { "value": 15 }] }
}
```



GET: <http://localhost:3000/api/events>

POST POST processGET GET eventsGET GET metrics+local

assignment_project.ai / GET eventsSaveShare

GEThttp://localhost:3000/api/eventsSend

ParamsAuthHeaders (7)BodyScriptsSettings

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body200 OK57 ms1.07 KB

PrettyRawPreviewVisualizeJSON

```
24 {
25   "_id": "673cf115800bfde3b948d3fc",
26   "eventId": "4",
27   "userId": "456",
28   "payload": {
29     "items": [
30       {
31         "value": 5
32       },
33       {
34         "value": 15
35       }
36     ]
37   },
38   "metrics": {
39     "count": 2,
40     "average": 10
41   },
42   "status": "Completed",
43   "timestamp": "2024-11-19T20:12:05.623Z",
44   "__v": 0
45 }
```

GET: <http://localhost:3000/api/metrics>

POST POST processGET GET eventsGET GET metrics+local

assignment_project.ai / GET metricsSaveShare

GEThttp://localhost:3000/api/metricsSend

ParamsAuthHeaders (7)BodyScriptsSettings

Key	Value	Description	Bulk Edit
Key	Value	Description	

Body200 OK43 ms271 B

PrettyRawPreviewVisualizeJSON

```
1 {
2   "_id": null,
3   "total": 4,
4   "avgItems": 10
5 }
```