**KAFKA INSTALLATION IN WINDOW**

1. **Download Kafka**

From Apache Kafka

Extract .tgz file into c direction

1. **Install Java**

From oracle

Setup java home environment variable

1. **Start ZooKeeper and Kafka Using Command Prompt**

Start Zookeeper:

(.\bin\windows\zookeeperserverstart.bat.\config\zookeeper.properties)

Open New Command Prompt And Start Kafka Broker:

(.\bin\windows\kafka-topics.bat --create --topic test-topic --bootstrap-server localhost:9092 --partitions 1 --replication-factor 1)

1. **Install Kafka Js In Node Js Terminal**

(npm install kafkajs)

1. **Create Producer.js**

const { Kafka } = require("kafkajs");

const kafka = new Kafka({

clientId: "my-producer",

brokers: ["localhost:9092"], // Kafka broker address

});

const producer = kafka.producer();

const produceMessage = async () => {

await producer.connect();

try {

await producer.send({

topic: "test-topic",

messages: [{ value: "Hello from Node.js producer!" }],

});

console.log("Message sent successfully!");

} catch (error) {

console.error("Error in sending message:", error);

} finally {

await producer.disconnect();

}

};

produceMessage();

1. **Create Consumer.js**

const { Kafka } = require("kafkajs");

const kafka = new Kafka({

clientId: "my-consumer",

brokers: ["localhost:9092"], // Kafka broker address

});

const consumer = kafka.consumer({ groupId: "test-group" });

const consumeMessages = async () => {

await consumer.connect();

await consumer.subscribe({ topic: "test-topic", fromBeginning: true });

await consumer.run({

eachMessage: async ({ topic, partition, message }) => {

console.log(`Received message: ${message.value.toString()}`);

},

});

};

consumeMessages();

1. **Run Producer.js**

node producer.js

1. **Run Consumer.js**

node consumer.js