1. Запустить Zookeeper

```
alex@MacBook-Pro-Alexander apache-zookeeper-3.8.4-bin % bin/zkServer.sh start
/usr/bin/java
Zookeeper JMX enabled by default
Using config: /Users/alex/apache-zookeeper-3.8.4-bin/bin/../conf/zoo.cfg
Starting zookeeper ... STARTED
alex@MacBook-Pro-Alexander apache-zookeeper-3.8.4-bin % bin/zkCli.sh -server 127.0.0.1:2181
/usr/bin/java
Connecting to 127.0.0.1:2181
2024-03-11 09:44:29,318 [myid:] - INFO [main:o.a.z.Environment@98] - Client environment:zookeeper.version=3.8.4-9316c2;
2-12 22:16 UTC
2024-03-11 09:44:29,319 [myid:] - INFO [main:o.a.z.Environment@98] - Client environment:host.name=localhost
2024-03-11 09:44:29,319 [myid:] - INFO [main:o.a.z.Environment@98] - Client environment:java.version=21.0.2
2024-03-11 09:44:29,319 [myid:] - INFO [main:o.a.z.Environment@98] - Client environment:java.version=21.0.2
```

2. Запустить kafka

```
[alex@MacBook-Pro-Alexander kafka_2.13-3.7.0 % bin/kafka-server-start.sh config/server.properties
[2024-03-11 09:59:04,518] INFO Registered kafka:type=kafka.Log4jController MBean (kafka.utils.Log4jControllerRegistratic [2024-03-11 09:59:04,684] INFO Setting -D jdk.tls.rejectClientInitiatedRenegotiation=true to disable client-initiated TI til)
[2024-03-11 09:59:04,729] INFO Registered signal handlers for TERM, INT, HUP (org.apache.kafka.common.utils.LoggingSigna [2024-03-11 09:59:04,730] INFO starting (kafka.server.KafkaServer)
[2024-03-11 09:59:04,731] INFO Connecting to zookeeper on localhost:2181 (kafka.server.KafkaServer)
[2024-03-11 09:59:04,738] INFO [ZooKeeperClient Kafka server] Initializing a new session to localhost:2181. (kafka.zooka [2024-03-11 09:59:04,746] INFO Client environment:zookeeper.version=3.8.3-6addd36467c0bcf0de452d54ebefa3058098ab56, builokeeper)
[2024-03-11 09:59:04,746] INFO Client environment:host.name=localhost (org.apache.zookeeper.ZooKeeper)
[2024-03-11 09:59:04,746] INFO Client environment:java.version=21.0.2 (org.apache.zookeeper.ZooKeeper)
[2024-03-11 09:59:04,746] INFO Client environment:java.vendor=Amazon.com Inc. (org.apache.zookeeper.ZooKeeper)
[2024-03-11 09:59:04,746] INFO Client environment:java.home=/Library/Java/JavaVirtualMachines/amazon-corretto-21.jdk/Con [2024-03-11 09:59:04,746] INFO Client environment:java.class.path=/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/argparse4j-0.7.0.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Users/alex/kafka_2.13-3.7.0/bin/./libs/activation-1 opalliance-repackaged-2.6.1.jar:/Us
```

3. Установить переменную окружения РАТН

```
[alex@MacBook-Pro-Alexander kafka_2.13-3.7.0 % cd bin
[alex@MacBook-Pro-Alexander bin % pwd
/Users/alex/kafka_2.13-3.7.0/bin
[alex@MacBook-Pro-Alexander bin % PATH="$PATH:/Users/alex/kafka_2.13-3.7.0/bin"
[alex@MacBook-Pro-Alexander bin % cd ..
```

4. Создать топик и убедиться, что он создан

5. Запустить producer, записать несколько сообщения

```
[alex@MacBook-Pro-Alexander ~ % kafka-console-producer.sh --topic test --bootstrap-server localhost:9092
>Test message 1
>Test message 2
>Test message 3
>One more message
>Final message
|>^C2
```

6. Запустить consumer и прочитать сообщения

```
[alex@MacBook-Pro-Alexander ~ % kafka-console-consumer.sh --topic test --from-beginning --bootstrap-server localhost:9092
Test message 1
Test message 2
Test message 3
One more message
```

7. Записать сообщения с помощью producer во время работы consumer

8. Убедиться, что эти сообщения прочитаны

```
alex@MacBook-Pro-Alexander ~ % kafka-console-consumer.sh --topic test --from-beginning --bootstrap-server localhost:9092
Test message 1
Test message 2
Test message 3
One more message
Message!!
Aaaaa
```