```
prerequesities:
```

Vagrant virtual box

RAM should be minimun 4GB

Java(1.8)

ubuntu(used) OS

Install apache kafka from its website using command:

wget https://mirrors.estointernet.in/apache/kafka/2.7.0/kafka_2.13-2.7.0.tgz

Untar this using command:

```
tar -xzf kafka_2.13-2.7.0.tgz

$ cd kafka_2.13-2.7.0
```

Created Zookeeper and Kafka Server:

bin/zookeeper-server-start.sh config/zookeeper.properties--->For zookeeper Service

```
[2021-01-21 11:03:37,256] INFO Configuring NIO connection handler with 10s sessi onless connection timeout, 1 selector thread(s), 2 worker threads, and 64 kB dir ect buffers. (org.apache.zookeeper.server.NIOServerCnxnFactory)
[2021-01-21 11:03:37,265] INFO binding to port 0.0.0.0/0.0.0.0:2181 (org.apache.zookeeper.server.NIOServerCnxnFactory)
[2021-01-21 11:03:37,291] INFO zookeeper.snapshotSizeFactor = 0.33 (org.apache.zookeeper.server.ZKDatabase)
[2021-01-21 11:03:37,300] INFO Snapshotting: 0x0 to /tmp/zookeeper/version-2/snapshot.0 (org.apache.zookeeper.server.persistence.FileTxnSnapLog)
[2021-01-21 11:03:37,307] INFO Snapshotting: 0x0 to /tmp/zookeeper/version-2/snapshot.0 (org.apache.zookeeper.server.persistence.FileTxnSnapLog)
[2021-01-21 11:03:37,335] INFO Using checkIntervalMs=60000 maxPerMinute=10000 (org.apache.zookeeper.server.ContainerManager)
[2021-01-21 11:38:23,365] INFO Creating new log file: log.1 (org.apache.zookeeper.server.persistence.FileTxnLog)
```

\$ bin/kafka-server-start.sh config/server.properties----->for Kafka service

```
[2021-01-21 11:03:37,256] INFO Configuring NIO connection handler with 10s sessionless connection timeout, 1 selector thread(s), 2 worker threads, and 64 kB direct buffers. (org.apache.zookeeper.server.NIOServerCnxnFactory)
[2021-01-21 11:03:37,265] INFO binding to port 0.0.0.0/0.0.0:2181 (org.apache.zookeeper.server.NIOServerCnxnFactory)
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[2021-01-21 11:38:23,365] INFO Creating new log file: log.1 (org.apache.zookeeper.server.persistence.FileTxnLog)
```

Created one Topic using:(topic named as first-events)

bin/kafka-topics.sh --create --topic first-events --bootstrap-server localhost:9092

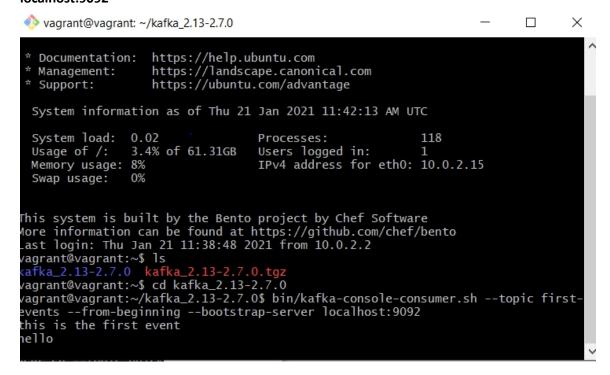
```
vagrant@vagrant:~/kafka_2.13-2.7.0$ ./bin/kafka-topics.sh --bootstrap-server=lo
calhost:9092 --list
__consumer_offsets
first-events
vagrant@vagrant:~/kafka_2.13-2.7.0$|
```

Created Producers and Consumers:

bin/kafka-console-producer.sh --topic first-events --bootstrap-server localhost:9092

```
This system is built by the Bento project by Chef Software
More information can be found at https://github.com/chef/bento
Last login: Thu Jan 21 11:37:38 2021 from 10.0.2.2
vagrant@vagrant:~$ bin/kafka-topics.sh --create --topic first-events --bootstrap
-server localhost:9092
-bash: bin/kafka-topics.sh: No such file or directory
vagrant@vagrant:~$ ls
kafka_2.13-2.7.0 kafka_2.13-2.7.0.tgz
vagrant@vagrant:~$ cd kafka_2.13-2.7.0
vagrant@vagrant:~/kafka_2.13-2.7.0$ bin/kafka-topics.sh --create --topic first-e
vents --bootstrap-server localhost:9092
Created topic first-events.
vagrant@vagrant:~/kafka_2.13-2.7.0$ bin/kafka-console-producer.sh --topic quick
start-events --bootstrap-server localhost:9092
>^Cvagrant@vagrant:~/kafka_2.13-2.7.cd kafka_2.13-2.7.0^C
vagrant@vagrant:~/kafka_2.13-2.7.0$ bin/kafka-console-producer.sh --topic first-
events --bootstrap-server localhost:9092
>this is the first event
>hello
```

\$ bin/kafka-console-consumer.sh --topic first-events --from-beginning --bootstrap-server localhost:9092



Final result:(producer and consumer)(we can get messages from producer to consumer)

```
Memory usage: 7% IPv4 address for eth0: 10.0.2.15

Memory usage: 7% IPv4 address for eth0: 10.0.2.15

Swap usage: 0% IPv4 address for eth0: 10.0.2.15

This system is built by the Bento project by Chef Software
More information can be found at https://plinhub.com/chef/bento
Last login: Thu Jan 21 11:37:38 2021 from 10.0.2.2

vagrant@vagrant:~$ bir kafka-console-producer.sh --topic first-events --bootstrap
-server localhost:9092
-bash: bir/kafka-topics.sh: No such file or directory

vagrant@vagrant:~$ ls
kafka_2.13-2.7.0 tog2

vagrant@vagrant:~$ dkafka_2.13-2.7.0.tog2

vagrant@vagrant:~$ kafka_2.13-2.7.0 tog2

vagrant@vagrant:~$ bir kafka_2.13-2.7.0 tog2

vagrant@vagrant:~\Agfka_2.13-2.7.0 tog3

vagrant@vagrant:~\Agfka_2.13-2
```