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Citation and References: -

To implement the lab, I have taken help from following source

(a) Discussion tutorial on kafka application and tutorial point

Concern and grading part: -

(a) generate.cpp:-

To run this program, use the following command: -

g++ -std=c++11 -o generate generate.cpp

./generate

(b) SimpleProducer.java:-

To run this program, use the following command: -

javac -cp "<path to kafka>/libs/*" "<path to file inside kafka>SimpleProducer.java"

java -cp "<path to kafka>/libs/*": . SimpleProducer

(c) SimpleConsumer.java:-

Run this program in three different terminals:-

javac -cp "<path to kafka>/libs/*" "<path to file inside kafka>SimpleConsumer.java"

java -cp "<path to kafka>/libs/*": . SimpleConsumer Topic-1

java -cp "<path to kafka>/libs/*": . SimpleConsumer Topic-2

java -cp "<path to kafka>/libs/*": . SimpleConsumer Topic-3

Sample-output:-

Top-left terminal (student@studentVM: ~/Downloads/kafka_new):

```
student@studentVM:~$ cd Downloads
student@studentVM:~/Downloads$ cd kafka_new
student@studentVM:~/Downloads/kafka_new$ bin/zookeeper-server-start.sh config/zo
okeeper.properties
[2018-04-21 11:56:59,949] INFO Reading configuration from: config/zookeeper.prop
erties (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2018-04-21 11:56:59,956] INFO autopurge.snapRetainCount set to 3 (org.apache.zo
okeeper.server.DatadirCleanupManager)
[2018-04-21 11:56:59,957] INFO autopurge.purgeInterval set to 0 (org.apache.zook
eeper.server.DatadirCleanupManager)
[2018-04-21 11:56:59,957] INFO Purge task is not scheduled. (org.apache.zookeepe
r.server.DatadirCleanupManager)
[2018-04-21 11:56:59,957] WARN Either no config or no quorum defined in config,
running in standalone mode (org.apache.zookeeper.server.quorum.QuorumPeerMain)
[2018-04-21 11:57:00,017] INFO Reading configuration from: config/zookeeper.prop
erties (org.apache.zookeeper.server.quorum.QuorumPeerConfig)
[2018-04-21 11:57:00,018] INFO Starting server (org.apache.zookeeper.server.ZooK
eeperServerMain)
[2018-04-21 11:57:00,046] INFO Server environment:zookeeper.version=3.4.10-39d3a
4f269333c922ed3db283be479f9deacaa0f, built on 03/23/2017 10:13 GMT (org.apache.z
ookeeper.server.ZooKeeperServer)
[2018-04-21 11:57:00,047] INFO Server environment:host.name=studentVM (org.apach
e.zookeeper.server.ZooKeeperServer)
[2018-04-21 11:57:00,060] INFO Server environment:java.version=1.8.0_162 (org.ap
```

Top-right terminal (student@studentVM: ~/Downloads/kafka_new):

```
[2018-04-21 11:56:39,238] INFO shutting down (kafka.server.KafkaServer)
student@studentVM:~/Downloads/kafka_new$ bin/kafka-server-start.sh config/server
.properties
[2018-04-21 11:57:29,776] INFO Registered kafka:type=kafka.Log4jController MBean
(kafka.utils.Log4jControllerRegistration$)
[2018-04-21 11:57:30,356] INFO starting (kafka.server.KafkaServer)
[2018-04-21 11:57:30,360] INFO Connecting to zookeeper on localhost:2181 (kafka.
server.KafkaServer)
[2018-04-21 11:57:30,388] INFO [ZooKeeperClient] Initializing a new session to l
ocalhost:2181. (kafka.zookeeper.ZooKeeperClient)
[2018-04-21 11:57:30,396] INFO Client environment:zookeeper.version=3.4.10-39d3a
4f269333c922ed3db283be479f9deacaa0f, built on 03/23/2017 10:13 GMT (org.apache.z
ookeeper.ZooKeeper)
[2018-04-21 11:57:30,401] INFO Client environment:host.name=studentVM (org.apach
e.zookeeper.ZooKeeper)
[2018-04-21 11:57:30,401] INFO Client environment:java.version=1.8.0_162 (org.ap
ache.zookeeper.ZooKeeper)
[2018-04-21 11:57:30,401] INFO Client environment:java.vendor=Oracle Corporation
(org.apache.zookeeper.ZooKeeper)
[2018-04-21 11:57:30,401] INFO Client environment:java.home=/usr/lib/jvm/java-8-
openjdk-amd64/jre (org.apache.zookeeper.ZooKeeper)
[2018-04-21 11:57:30,401] INFO Client environment:java.class.path=/home/student/
Downloads/kafka_new/bin/../libs/aopalliance-repackaged-2.5.0-b32.jar:/home/stude
nt/Downloads/kafka_new/bin/../libs/argparse4j-0.7.0.jar:/home/student/Downloads/
```

Middle-left terminal (student@studentVM: ~/Downloads/kafka_new):

```
student@studentVM:~$ cd Downloads
student@studentVM:~/Downloads$ cd kafka_new
student@studentVM:~/Downloads/kafka_new$ ls
bin      libs      NOTICE            SimpleConsumer.class  SimpleProducer.java
config   LICENSE   shell_consumer    SimpleConsumer.java   site-docs
lab10    logs      shell_producer    SimpleProducer.class  Untitled Document
student@studentVM:~/Downloads/kafka_new$ javac -cp "/home/student/Downloads/kafk
a_new/libs/*" "/home/student/Downloads/kafka_new/SimpleConsumer.java"
student@studentVM:~/Downloads/kafka_new$ java -cp "/home/student/Downloads/kafka
_new/libs/*":. SimpleConsumer Topic-1
Subscribed to topic Topic-1
^Cstudent@studentVM:~/Downloads/kafka_new$ java -cp "/home/student/Downloads/kaf
_new/libs/*":. SimpleConsumer Topic-2
Subscribed to topic Topic-2
Random value= 5475
Random value= 5693
Random value= 2997
Random value= 9086
```

Middle-right terminal (student@studentVM: ~/Downloads/kafka_new):

```
student@studentVM:~$ cd Downloads
student@studentVM:~/Downloads$ cd kafka_new
student@studentVM:~/Downloads/kafka_new$ ./shell_producer
Topic-3
2479
Message sent successfully
Topic-1
927
Message sent successfully
Topic-1
6013
Message sent successfully
Topic-2
5475
Message sent successfully
Topic-2
5693
Message sent successfully
Topic-1
2102
Message sent successfully
Topic-2
2997
Message sent successfully
```

Bottom-left terminal (student@studentVM: ~/Downloads/kafka_new):

```
student@studentVM:~$ cd Downloads
student@studentVM:~/Downloads$ cd kafka_new
student@studentVM:~/Downloads/kafka_new$ javac -cp "/home/student/Downloads/kafk
a_new/libs/*" "/home/student/Downloads/kafka_new/SimpleConsumer.java"
student@studentVM:~/Downloads/kafka_new$ java -cp "/home/student/Downloads/kafka
_new/libs/*":. SimpleConsumer Topic-3
Subscribed to topic Topic-3
Random value= 2479
Random value= 8755
Random value= 1068
```

Bottom-right terminal (student@studentVM: ~/Downloads/kafka_new):

```
student@studentVM:~$ cd Downloads
student@studentVM:~/Downloads$ cd kafka_new
student@studentVM:~/Downloads/kafka_new$ javac -cp "/home/student/Downloads/kafk
a_new/libs/*" "/home/student/Downloads/kafka_new/SimpleConsumer.java"
student@studentVM:~/Downloads/kafka_new$ java -cp "/home/student/Downloads/kafka
_new/libs/*":. SimpleConsumer Topic-1
Subscribed to topic Topic-1
Random value= 927
Random value= 6013
Random value= 2102
Random value= 4373
Random value= 301
```

Plain Text ▾   Tab Width: