Assignment23(Khafka1)

Task 1: Create a kafka topic named KeyLessTopic.
Inside KeyLessTopic insert following data:
{"name":"John", "exp":16}
{"name":"Finn", "exp":20}
{"name":"Cylin", "exp":18}
{"name":"Mark", "exp":2}
{"name":"Akshay", "exp":14}

Initial steps to be followed to run khafka:

1.Start Zookeeper using the below command
cd $KAFKA_HOME
#./bin/zookeeper-server-start ./etc/kafka/zookeeper.properties
./bin/zookeeper-server-start.sh ./config/zookeeper.properties
2. Start the broker using below command
cd $KAFKA_HOME
#./bin/kafka-server-start ./etc/kafka/server.properties
./bin/kafka-server-start.sh ./config/server.properties
3.Create the topic using below command
cd $KAFKA_HOME
./bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper
localhost:2181 --partitions 1 --replication-factor 1

Command used to create topic:

./bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper
localhost:2181 --partitions 1 --replication-factor 1

Topic creation screenshot:

```
[acadgild@localhost kafka_2.12-0.10.1.1]$ cd $KAFKA_HOME
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost kafka_2.12-0.10.1.1]$ ./bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper localhost:2181 --partitions 1 --repl
ication-factor 1
Created topic "KeyLessTopic".
[acadgild@localhost kafka_2.12-0.10.1.1]$
```

Producer Input:

```
Last login: Tue Jun 12 11:40:00 2018 from 192.168.0.5
[acadgild@localhost ~]$ cd $KAFKA_HOME
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost kafka_2.12-0.10.1.1]$ ./bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyLessTopic
{"name":"John", "exp":16}
{"name":"Finn", "exp":20}
{"name":"Cylin", "exp":18}
{"name":"Mark", "exp":2}
{"name":"Akshay", "exp":14}
```

Task 2: Create a console consumer that reads KeyLessTopic from beginning

Command used to read the consumer:

./bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyLessTopic

Consumer Output:

```
Last login: Tue Jun 12 11:42:21 2018 from 192.168.0.5
[acadgild@localhost ~]$ cd $KAFKA_HOME
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost kafka_2.12-0.10.1.1]$ ./bin/kafka-console-consumer.sh --topic KeyLessTopic --from-beginning --zookeeper localhost:2181 --p
roperty print.key=true
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by pa
ssing [bootstrap-server] instead of [zookeeper].
null    {"name":"John", "exp":16}
null    {"name":"Finn", "exp":20}
null    {"name":"Cylin", "exp":18}
null    {"name":"Mark", "exp":2}
null    {"name":"Akshay", "exp":14}
```
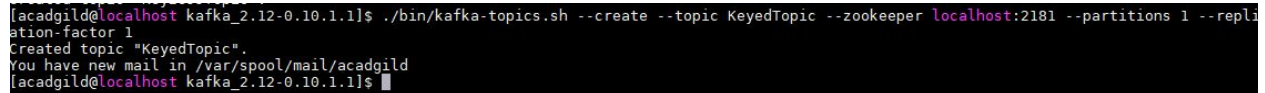
Null shows that key is NULL

Task 3: Create a kafka topic named KeyedTopic. Inside KeyedTopic insert following data:

Command used to create the topic:

./bin/kafka-topics.sh --create --topic KeyedTopic --zookeeper localhost:2181 --partitions 1 --replication-factor 1
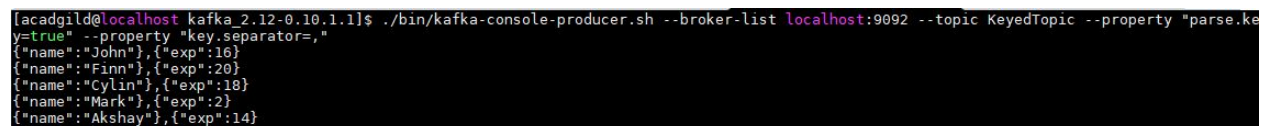
Topic creation:

```
[acadgild@localhost kafka_2.12-0.10.1.1]$ ./bin/kafka-topics.sh --create --topic KeyedTopic --zookeeper localhost:2181 --partitions 1 --repli
ation-factor 1
Created topic "KeyedTopic".
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost kafka_2.12-0.10.1.1]$
```

 The part before comma(,) should be treated as key and after comma(,) should be treated as value {"name":"John"},{"exp":16} {"name":"Finn"},{"exp":20} {"name":"Cylin"},{"exp":18} {"name":"Mark"},{"exp":2} {"name":"Akshay"},{"exp":14}

Command used to input the data in producer:

./bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyedTopic --property "parse.key=true" --property "key.separator=,"

Producer Input:

```
[acadgild@localhost kafka_2.12-0.10.1.1]$ ./bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyedTopic --property "parse.ke
y=true" --property "key.separator=,"
{"name":"John"},{"exp":16}
{"name":"Finn"},{"exp":20}
{"name":"Cylin"},{"exp":18}
{"name":"Mark"},{"exp":2}
{"name":"Akshay"},{"exp":14}
```

Task 4: Create a console consumer that reads KeyedTopic from beginning The key and value should be separated by '-'

Command used to read the producer :

./bin/kafka-console-consumer.sh --topic KeyedTopic --from-beginning --zookeeper localhost:2181 --property print.key=true --property key.separator="-"

Consumer output with key and value:

{"name":"John"}-{"exp":16}
{"name":"Finn"}-{"exp":20}
{"name":"Cylin"}-{"exp":18}
{"name":"Mark"}-{"exp":2}
{"name":"Akshay"}-{"exp":14}