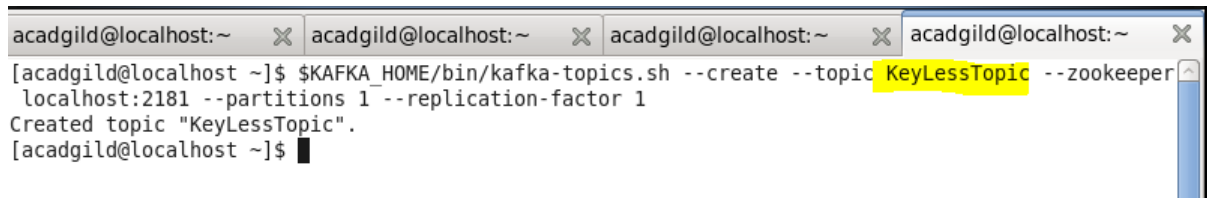


Assignment-22

Task 1:

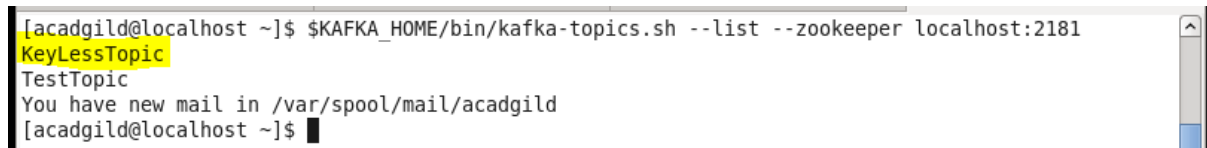
Create a kafka topic named **KeyLessTopic**.

A Kafka topic with name **KeyLessTopic** has been created using command as shown in the below screenshot.

A terminal window with multiple tabs. The active tab shows the command to create a Kafka topic. The command is: `$KAFKA_HOME/bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper localhost:2181 --partitions 1 --replication-factor 1`. The output is: `Created topic "KeyLessTopic".`

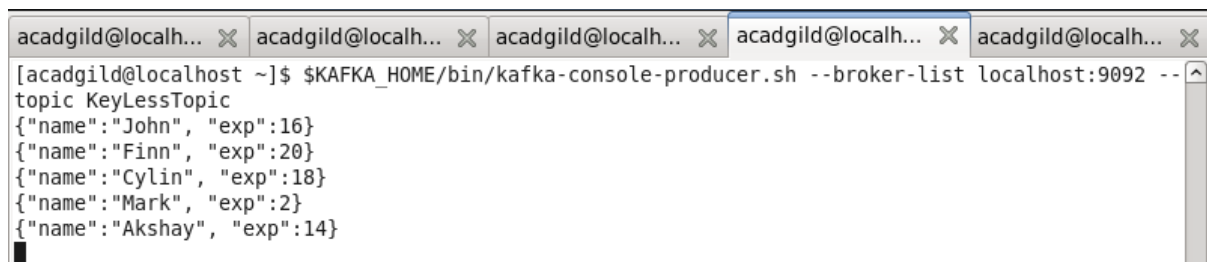
```
acadmild@localhost:~  X  acadmild@localhost:~  X  acadmild@localhost:~  X  acadmild@localhost:~  X
[acadmild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper
localhost:2181 --partitions 1 --replication-factor 1
Created topic "KeyLessTopic".
[acadmild@localhost ~]$
```

The topic created is shown in the below screenshot using the “**List**” command.

A terminal window showing the command to list Kafka topics. The command is: `$KAFKA_HOME/bin/kafka-topics.sh --list --zookeeper localhost:2181`. The output is: `KeyLessTopic`
`TestTopic`
`You have new mail in /var/spool/mail/acadmild`

```
[acadmild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --list --zookeeper localhost:2181
KeyLessTopic
TestTopic
You have new mail in /var/spool/mail/acadmild
[acadmild@localhost ~]$
```

Inserting data into producer as keyless topic.

A terminal window with multiple tabs. The active tab shows the command to produce data to a Kafka topic. The command is: `$KAFKA_HOME/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyLessTopic`. The output shows five JSON objects being produced:

```
acadmild@localh...  X  acadmild@localh...  X  acadmild@localh...  X  acadmild@localh...  X  acadmild@localh...  X
[acadmild@localhost ~]$ $KAFKA_HOME/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

A console consumer has been created which reads the data from producer from the beginning.

A terminal window with five tabs, all labeled 'acadgild@localh...'. The active tab shows the command '\$KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyLessTopic --from-beginning --zookeeper localhost:2181 --property print.key=false' being executed. The output displays a warning about the deprecated ConsoleConsumer and then prints five JSON records: {"name": "John", "exp": 16}, {"name": "Finn", "exp": 20}, {"name": "Cylin", "exp": 18}, {"name": "Mark", "exp": 2}, {"name": "Akshay", "exp": 14}.

```
acadgild@localh... X acadgild@localh... X acadgild@localh... X acadgild@localh... X acadgild@localh... X
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyLessTopic --from-beginning --zookeeper localhost:2181 --property print.key=false
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-server] instead of [zookeeper].
{"name": "John", "exp": 16}
{"name": "Finn", "exp": 20}
{"name": "Cylin", "exp": 18}
{"name": "Mark", "exp": 2}
{"name": "Akshay", "exp": 14}
```

Task 3:

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

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}
```

A Kafka topic with name “KeyedTopic” has been created as shown in the below screenshot.

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --create --topic KeyedTopic --zookeeper localhost:2181 --partitions 1 --replication-factor 1
Created topic "KeyedTopic".
[acadgild@localhost ~]$
```

Created topic is viewed using the list command as shown in the below screenshot.

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --list --zookeeper localhost:2181
KeyLessTopic
KeyedTopic
TestTopic
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```

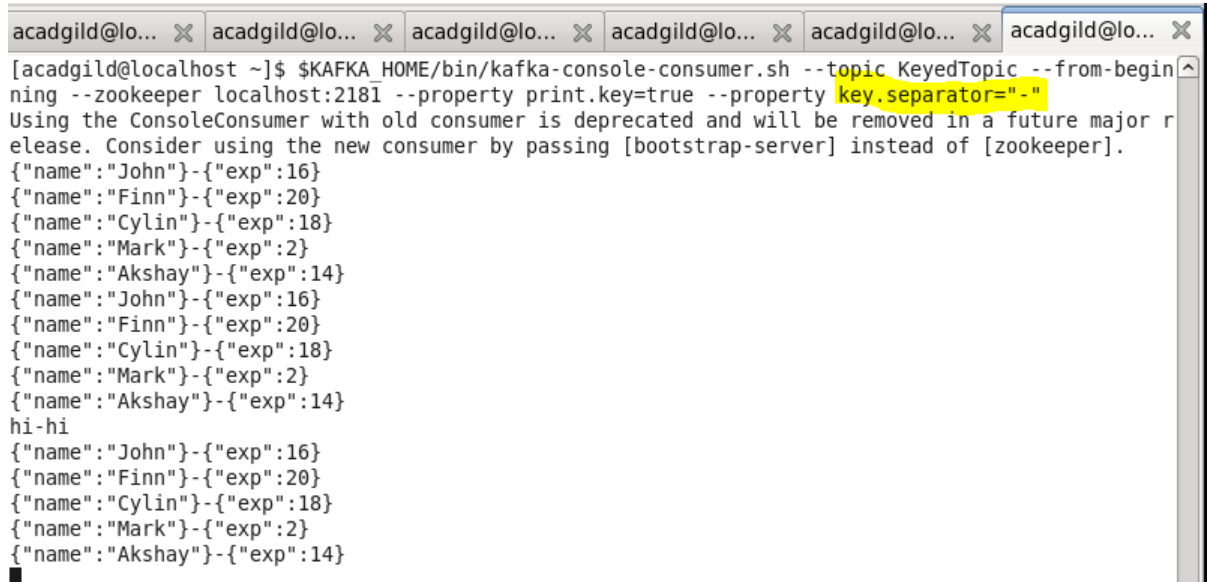
Inserting data into the producer as keyed topic.

```
acadgild@lo... X acadgild@lo... X acadgild@lo... X acadgild@lo... X acadgild@lo... X acadgild@lo... X
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyedTopic --property "parse.key=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 '-'

Created a console consumer which reads the KeyedTopic from the beginning and the output is separated by "-" as shown in the below screenshot.



```
acadgild@lo... X acadgild@lo... X acadgild@lo... X acadgild@lo... X acadgild@lo... X acadgild@lo... X
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyedTopic --from-beginning --zookeeper localhost:2181 --property print.key=true --property key.separator="- "
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-server] instead of [zookeeper].
{"name": "John"}-{"exp": 16}
{"name": "Finn"}-{"exp": 20}
{"name": "Cylin"}-{"exp": 18}
{"name": "Mark"}-{"exp": 2}
{"name": "Akshay"}-{"exp": 14}
{"name": "John"}-{"exp": 16}
{"name": "Finn"}-{"exp": 20}
{"name": "Cylin"}-{"exp": 18}
{"name": "Mark"}-{"exp": 2}
{"name": "Akshay"}-{"exp": 14}
hi-hi
{"name": "John"}-{"exp": 16}
{"name": "Finn"}-{"exp": 20}
{"name": "Cylin"}-{"exp": 18}
{"name": "Mark"}-{"exp": 2}
{"name": "Akshay"}-{"exp": 14}
```