

DSC 650 - Assignment 11

Simulating Kafka Producer Streams. A companion file consumes the Kafka stream.

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Some Supplemental Resources Installing Kafka in Windows

- <https://www.geeksforgeeks.org/how-to-install-and-run-apache-kafka-on-windows/>
(<https://www.geeksforgeeks.org/how-to-install-and-run-apache-kafka-on-windows/>).

Built using Apache 2.8.1 on Windows

```
In [1]: 1 import json
        2 import uuid
        3 import os
        4 import pandas as pd
        5
        6 from pathlib import Path
        7 import kafka
        8 from kafka import KafkaProducer, KafkaAdminClient
        9 from kafka.admin.new_topic import NewTopic
       10 from kafka.errors import TopicAlreadyExistsError
       11
       12 import pyarrow as pa
       13 #from pyarrow.json import read_json
       14 import pyarrow.parquet as pq
       15
       16
```

Kafka is being run as a separate local server. This section closes any running Kafka & Zookeeper processes. Removed any existing topics by deleting the files from disk. This is a sub-optimal solution. KafkaAdminClient.delete_topics() kept crashing and corrupting Kafka. It's likely a bug (or user error). I worked around the issue by manually deleting the files.

This method is sub optimal since topics are supposed to be streaming AND persistent. However I'm inferring the purpose of the assignment is to simulate streaming data and display that data at the requisite intervals.

Once data is deleted, fresh instances of Zookeeper and Kafka are launched.

```
In [14]: 1 import time
        2 #///*** Get Working Directory
        3 current_dir = Path(os.getcwd()).absolute()
        4
        5 #///*** Go up Two folders
        6 kafka_dir = current_dir.parents[2].joinpath("kafka")
        7 tmp_dir = kafka_dir.joinpath("tmp")
```

```

8 log_dir = kafka_dir.joinpath("logs")
9
10 res = os.system(str(kafka_dir)+"\stop_kafka-server-stop.bat")
11 print("Stop Running Kafka Server: ", res)
12
13
14 res = os.system(str(kafka_dir)+"\stop_zookeeper-server-stop.bat")
15 print("Stop Running Zookeeper Server: ", res)
16 print("Waiting For everything to close gracefully.....")
17 time.sleep(5)
18 #!/*** Delete all Kafka and Zookeeper logs.
19 #!/*** We can't kill the partitions programtically with the Windows v
20 """
21 for root, dirs, files in os.walk(log_dir, topdown=False):
22     #!/*** Delete all the log files
23     for file in files:
24         os.remove(Path(root).joinpath(file))
25 """
26
27 for root, dirs, files in os.walk(tmp_dir, topdown=False):
28     #!/*** Delete all the log files
29     for file in files:
30         os.remove(Path(root).joinpath(file))
31
32     for folder in dirs:
33         os.rmdir(Path(root).joinpath(folder))
34
35 time.sleep(1)
36 print("Starting Zookeeper: ")
37 os.system(f"start {str(kafka_dir)}\start_Kafka_zookeeper.bat")
38
39
40 print("Starting Kafka Server: ")
41 os.system(f"start {str(kafka_dir)}\start_Kafka_server.bat")
42
43

```

```

Stop Running Kafka Server:  0
Stop Running Zookeeper Server:  0
Waiting For everything to close gracefully.....
Starting Zookeeper:
Starting Kafka Server:

```

Out[14]: 0

Build a dictionary of accelerations and locations. Each Time index stores a list of File Paths to the stored .parquet files. The data dictionary collects times and file locations as a convenient collection.

```

In [3]: 1 #!/*** Get Working Directory
2 current_dir = Path(os.getcwd()).absolute()
3
4 #!/*** Go up Two folders
5 project_dir = current_dir.parents[2]
6
7 #!/*** Bdd Data Path

```

```

8 project_dir = project_dir.joinpath("dsc650/data/processed/bdd")
9
10 accel_dir = project_dir.joinpath("accelerations")
11 location_dir = project_dir.joinpath("locations")
12 print("Accel Dir: ",os.listdir(accel_dir))
13 print("Location Dir: ",os.listdir(location_dir))
14
15 #!/*** Build a list of times, to simulate packet transmission
16
17 #!/*** Parse the dir, each directory represents a time. Convert the s
18 #!/*** This feels very pythonic. I ended up not using this. But it's
19 times = [float(name.replace("t=", "")) for name in os.listdir(location
20
21 data = {
22     "accelerations" : {},
23     "locations" : {},
24 }
25
26 for root, dirs, files in os.walk(project_dir, topdown=False):
27
28     #!/*** Load each Parquet FilePath dictionary
29     for file in files:
30         key = ""
31         if str(accel_dir) in root:
32             key = "accelerations"
33
34         if str(location_dir) in root:
35             key = "locations"
36
37         #!/*** Convert the t= folder to a float time. This syncs the
38         time_index = float(root.split("\\")[-1].replace("t=", ""))
39
40         #!/*** Build Time_index Keys as needed
41         if time_index not in data[key].keys():
42             data[key][time_index] = []
43
44         data[key][time_index].append(Path(root).joinpath(file))
45
46
47 print("Parsed time Values in Seconds:",data["accelerations"].keys())

```

Accel Dir: ['t=000.0', 't=004.5', 't=007.8', 't=010.6', 't=014.9', 't=017.9', 't=021.3', 't=026.1', 't=030.4', 't=033.7', 't=037.7', 't=041.5', 't=045.4', 't=049.5', 't=052.5', 't=056.4', 't=060.1', 't=063.8', 't=066.7', 't=070.9', 't=073.9', 't=077.1', 't=081.4', 't=085.1', 't=088.3', 't=091.7', 't=094.7', 't=098.8', 't=102.5', 't=106.0', 't=109.9', 't=113.2', 't=117.2', 't=121.4']
 Location Dir: ['t=000.0', 't=004.5', 't=007.8', 't=010.6', 't=014.9', 't=017.9', 't=021.3', 't=026.1', 't=030.4', 't=033.7', 't=037.7', 't=041.5', 't=045.4', 't=049.5', 't=052.5', 't=056.4', 't=060.1', 't=063.8', 't=066.7', 't=070.9', 't=073.9', 't=077.1', 't=081.4', 't=085.1', 't=088.3', 't=091.7', 't=094.7', 't=098.8', 't=102.5', 't=106.0', 't=109.9', 't=113.2', 't=117.2', 't=121.4']
 Parsed time Values in Seconds: dict_keys([0.0, 4.5, 7.8, 10.6, 14.9, 17.9, 21.3, 26.1, 30.4, 33.7, 37.7, 41.5, 45.4, 49.5, 52.5, 56.4, 60.1, 63.8, 66.7, 70.9, 73.9, 77.1, 81.4, 85.1, 88.3, 91.7, 94.7, 98.8, 102.5, 106.0, 109.9, 113.2, 117.2, 121.4])

Configuration Parameters

```
In [5]: 1 config = dict(
2         bootstrap_servers=['127.0.0.1:9092'],
3         first_name='ition',
4         last_name='Admin'
5     )
6
7     config['client_id'] = '{}{}'.format(
8         config['last_name'],
9         config['first_name']
10    )
11    config['topic_prefix'] = '{}{}'.format(
12        config['last_name'],
13        config['first_name']
14    )
15
```

```
Out[5]: {'bootstrap_servers': ['127.0.0.1:9092'],
'first_name': 'ition',
'last_name': 'Admin',
'client_id': 'Adminition',
'topic_prefix': 'Adminition'}
```

Create Topic Utility Function

The `create_kafka_topic` helps create a Kafka topic based on your configuration settings.

For instance, if your first name is *John* and your last name is *Doe*,

`create_kafka_topic('locations')` will create a topic with the name `DoeJohn-locations`. The function will not create the topic if it already exists.

```
In [6]: 1 def create_kafka_topic(topic_name, config=config, num_partitions=1, r
2         bootstrap_servers = config['bootstrap_servers']
3         client_id = config['client_id']
4         topic_prefix = config['topic_prefix']
5         name = '{}-{}'.format(topic_prefix, topic_name)
6
7         admin_client = KafkaAdminClient(
8             bootstrap_servers=bootstrap_servers,
9             client_id=client_id
10        )
11
12        topic = NewTopic(
13            name=name,
14            num_partitions=num_partitions,
15            replication_factor=replication_factor
16        )
17
18        topic_list = [topic]
19        try:
20            admin_client.create_topics(new_topics=topic_list)
21            print('Created topic "{}"'.format(name))
```

```

22     except TopicAlreadyExistsError as e:
23         print('Topic "{}" already exists'.format(name))
24
25 create_kafka_topic('locations')

```

```

Topic "Adminition-locations" already exists
Topic "Adminition-accelerations" already exists

```

Running the code to delete all topics, completely kills Kafka under Windows using version 2.8.1. It may be fixed in version 3.0 however, Kafka won't run this version under Windows due to an audit issue. I suspect it's related to the vulnerabilities in Log4j.

```

In [8]: 1 """
2 admin_client = KafkaAdminClient(
3         bootstrap_servers=config['bootstrap_servers'],
4         client_id=config['client_id']
5     )
6 #/** List Topics
7 print(admin_client.list_topics())
8 admin_client.delete_topics(admin_client.list_topics())
9
10 """
11

```

Skip this...It Breaks Kafka

Kafka Producer

The following code creates a `KafkaProducer` object which you can use to send Python objects that are serialized as JSON.

Note: This producer serializes Python objects as JSON. This means that object must be JSON serializable. As an example, Python `DateTime` values are not JSON serializable and must be converted to a string (e.g. ISO 8601) or a numeric value (e.g. a Unix timestamp) before being sent.

```

In [9]: 1 producer = KafkaProducer(
2         bootstrap_servers=config['bootstrap_servers'],
3         value_serializer=lambda x: json.dumps(x).encode('utf-8')

```

Send Data Function

The `send_data` function sends a Python object to a Kafka topic. This function adds the `topic_prefix` to the topic so `send_data('locations', data)` sends a JSON serialized message to `DoeJohn-locations`. The function also registers callbacks to let you know if the message has been sent or if an error has occurred.

```

In [10]: 1 def on_send_success(record_metadata):
2         print('Message sent:\n      Topic: "{}"\n      Partition: {}\n      Off
3         record_metadata.topic,
4         record_metadata.partition,
5         record_metadata.offset
6         ))
7
8 def on_send_error(excp):
9     print('I am an errback', exc_info=excp)
10    # handle exception
11
12 def send_data(topic, data, config=config, producer=producer, msg_key=None):
13     topic_prefix = config['topic_prefix']
14     topic_name = '{}-{}'.format(topic_prefix, topic)
15
16     if msg_key is not None:
17         key = msg_key
18     else:
19         key = uuid.uuid4().hex
20
21     producer.send(
22         topic_name,
23         value=data,
24         key=key.encode('utf-8')
25

```

```

In [11]: 1 """
2     #/** Reference on sending topic data
3     example_data = dict(
4         key1='value1',
5         key2='value2'
6     )
7
8     send_data('locations', example_data)
9     """
10

```

Update the topics at the indicated intervals, Times are managed with an iterable.

An endless while loop compares the elapsed time to the current element (time). If the elapsed time is greater than the element, Loop through the data dictionary keys "locations" and "accelerations". Publish each parquet file successively to the Kafka Producer. Then get the next time element.

The loop closes when getting the next time fails.

The loop waits 100ms between each cycle to avoid over-taxing the CPU.

```

In [12]: 1 import time
2
3     #/** Create an iterable of the times
4     times = iter(data['accelerations'].keys())
5

```

```

6
7 start_time = time.time()
8 element = next(times)
9 while True:
10
11     #!/*** Get the elapsed time
12     elapsed_time = time.time()-start_time
13
14     #!/*** Check if it's time to perform an action
15     if element <= elapsed_time:
16         try:
17             print()
18             print("=====")
19             print("=====")
20             print("Sending Values at Time:", element)
21             print("=====")
22             print("=====")
23
24             for topic in ['locations','accelerations']:
25
26                 print("Sending: ",topic)
27                 for filepath in data[topic][element]:
28                     send_data(topic, pd.read_parquet(filepath).to_json())
29
30                 #!/*** Get Next Element
31                 element = next(times)
32
33         except (StopIteration):
34             break
35
36     #!/*** Sleep for 100ms so we don't crush the CPU while waiting
37     time.sleep(.1)
38
39

```

```

=====
=====
Sending Values at Time: 0.0
=====
=====
Sending:  locations
Sending:  accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 0
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 1
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 0
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0

```

```
Offset: 1

=====
=====
Sending Values at Time: 4.5
=====
=====
Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 2
Sending: accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 3
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 2
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 3

=====
=====
Sending Values at Time: 7.8
=====
=====
Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 4
Sending: accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 5
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 4
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 5

=====
=====
Sending Values at Time: 10.6
=====
=====
Sending: locations
```



```
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 6
Sending:  accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 7
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 6
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 7
```

```
=====
=====
Sending Values at Time: 14.9
=====
=====
```

```
Sending:  locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 8
Sending:  accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 9
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 8
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 9
```

```
=====
=====
Sending Values at Time: 17.9
=====
=====
```

```
Sending:  locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 10
Sending:  accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
```

```
    Offset: 11
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 10
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 11

=====
=====
Sending Values at Time: 21.3
=====
=====
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 12
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 13
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 12
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 13

=====
=====
Sending Values at Time: 26.1
=====
=====
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 14
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 15
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 14
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
```

```
Offset: 15

=====
=====
Sending Values at Time: 30.4
=====
=====
Sending: locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 16
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 17
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 18
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 16
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 17

=====
=====
Sending Values at Time: 33.7
=====
=====
Sending: locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 19
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 20
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 21
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 22
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 23
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 18
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 19
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 20
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 21
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 22
```

```
=====
=====
Sending Values at Time: 37.7
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 24
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 25
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 26
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 27
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 28
```

```
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 29
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
```

```
    Offset: 23
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 24
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 25
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 26
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 27
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 28
```

```
=====
=====
Sending Values at Time: 41.5
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 30
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 31
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 32
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 33
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 34
```

```
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 35
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
```

```
    Offset: 29
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 30
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 31
Message sent:

=====
=====
Sending Values at Time: 45.4
=====
=====
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 36
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 37
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 38
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 39
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 40
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 33
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 34
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 35
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 36
Message sent:
    Topic: "Adminition-accelerations"
```

```
Partition: 0
Offset: 37

=====
=====
Sending Values at Time: 49.5
=====
=====

Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 41
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 42
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 43
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 44
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 45
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 46
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 47
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 48
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 49
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 50
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 51
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
```

```
    Offset: 52
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 53
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 38
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 39
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 40
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 41
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 42
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 43
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 44
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 45
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 46
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 47
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 48
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 49
Message sent:
    Topic: "Adminition-accelerations"
```



```
    Partition: 0
    Offset: 50
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 51

=====
=====
Sending Values at Time: 52.5
=====
=====
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 54
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 55
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 56
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 57
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 58
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 59
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 60
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 61
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 62
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 63
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 64
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 65
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 66
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 67
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 52
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 53
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 54
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 55
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 56
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 57
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 58
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 59
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 60
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 61
Message sent:
    Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 62
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 63
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 64
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 65
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 66
```

```
=====
=====
Sending Values at Time: 56.4
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 68
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 69
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 70
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 71
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 72
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 73
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 74
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 75
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 76
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 77
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 78
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 79
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 80
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 81
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 82
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 67
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 68
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 69
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 70
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 71
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 72
Message sent:
    Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 73
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 74
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 75
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 76
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 77
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 78
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 79
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 80
Message sent:
    Topic: "Adminition-accelerations"
```

```
=====
=====
Sending Values at Time: 60.1
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 83
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 84
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 85
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 86
Message sent:
```

```
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 87
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 88
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 89
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 90
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 91
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 92
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 93
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 94
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 95
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 96
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 97
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 98
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 99
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 100
Sending: accelerations
```

```
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 101
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 82
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 83
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 84
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 85
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 86
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 87
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 88
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 89
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 90
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 91
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 92
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 93
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 94
```

```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 95
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 96
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 97
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 98
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 99
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 100
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 101
```

```
=====
=====
Sending Values at Time: 63.8
=====
=====
```

```
Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 102
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 103
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 104
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 105
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 106
Message sent:
```



```
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 107
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 108
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 109
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 110
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 111
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 112
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 113
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 114
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 115
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 116
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 117
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 118
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 119
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 120
Message sent:
```

```
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 121
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 122
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 123
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 124
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 102
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 103
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 104
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 105
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 106
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 107
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 108
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 109
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 110
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 111
```

```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 112
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 113
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 114
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 115
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 116
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 117
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 118
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 119
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 120
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 121
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 122
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 123
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 124
```

```
=====
=====
Sending Values at Time: 66.7
```

```
=====
=====
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 125
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 126
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 127
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 128
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 129
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 130
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 131
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 132
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 133
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 134
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 135
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 136
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 137
Message sent:
```

```
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 138
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 139
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 140
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 141
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 142
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 143
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 144
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 146
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 147
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 148
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 125
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 126
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 127
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
```

```
    Offset: 128
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 129
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 130
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 131
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 132
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 133
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 134
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 135
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 136
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 137
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 138
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 139
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 140
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 141
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
```

```
    Offset: 142
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 143
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 144
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 145
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 146
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 147
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 148
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 149
```

```
=====
=====
```

Sending Values at Time: 70.9

```
=====
=====
```

Sending: locations

```
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 149
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 150
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 151
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 152
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 153
```

```
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 154
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 155
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 156
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 157
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 158
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 159
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 160
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 161
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 162
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 163
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 164
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 165
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 166
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 167
```



```
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 168
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 169
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 170
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 171
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 172
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 173
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 174
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 175
Sending: accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 176
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 150
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 151
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 152
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 153
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
```

```
    Offset: 154
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 155
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 156
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 157
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 158
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 159
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 160
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 161
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 162
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 163
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 164
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 165
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 166
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 167
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
```

```
    Offset: 168
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 169
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 170
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 171
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 172
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 173
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 174
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 175
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 176
```

```
=====
=====
Sending Values at Time: 73.9
=====
=====
```

```
Sending: locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 177
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 178
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 179
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 180
```

```
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 181
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 182
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 183
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 184
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 185
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 186
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 187
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 188
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 189
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 190
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 191
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 192
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 193
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 194
```

```
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 195
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 197
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 198
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 199
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 200
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 201
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 202
Sending: accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 203
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 177
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 178
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 179
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 180
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 181
Message sent:
  Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 182
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 183
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 184
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 185
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 186
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 187
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 188
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 189
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 190
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 191
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 192
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 193
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 194
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 195
Message sent:
    Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 196
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 197
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 198
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 199
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 200
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 201
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 202
```

```
=====
=====
Sending Values at Time: 77.1
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 204
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 205
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 206
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 207
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 208
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 209
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 210
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 211
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 212
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 213
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 214
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 215
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 216
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 217
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 218
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 219
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 220
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 221
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 222
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```



```
    Offset: 223
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 224
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 225
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 226
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 227
Sending:  accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 228
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 203
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 204
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 205
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 206
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 207
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 208
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 209
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 210
Message sent:
  Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 211
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 212
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 213
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 214
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 215
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 216
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 217
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 218
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 219
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 220
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 221
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 222
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 223
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 224
Message sent:
    Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 225
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 226
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 227
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 228
```

```
=====
=====
Sending Values at Time: 81.4
=====
=====
```

```
Sending: locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 229
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 230
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 231
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 232
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 233
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 234
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 235
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 236
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 237
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 238
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 239
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 240
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 241
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 242
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 243
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 244
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 245
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 246
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 247
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 248
Message sent:
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 250
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 251
Message sent:
    Topic: "Adminition-locations"
```

```
    Partition: 0
    Offset: 252
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 253
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 229
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 230
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 231
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 232
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 233
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 234
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 235
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 236
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 237
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 238
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 239
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 240
Message sent:
```

```
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 241
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 242
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 243
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 244
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 245
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 246
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 247
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 248
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 249
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 250
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 251
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 252
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 253
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 254
```

```
=====
=====
Sending Values at Time: 85.1
=====
=====
Sending:  locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 254
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 255
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 256
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 257
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 258
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 259
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 260
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 261
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 262
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 263
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 264
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 265
Message sent:
  Topic: "Adminition-locations"
```

```
    Partition: 0
    Offset: 266
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 267
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 268
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 269
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 270
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 271
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 272
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 273
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 274
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 275
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 276
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 277
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 278
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 255
Message sent:
```



```
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 256
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 257
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 258
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 259
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 260
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 261
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 262
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 263
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 264
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 265
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 266
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 267
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 268
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 269
Message sent:
```

```
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 270
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 271
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 272
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 273
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 274
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 275
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 276
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 277
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 278
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 279
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 280
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 281
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 282
```

```
=====
=====
Sending Values at Time: 88.3
=====
```

```
=====
Sending:  locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 279
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 280
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 281
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 282
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 283
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 284
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 285
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 286
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 287
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 288
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 289
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 290
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 291
Message sent:
  Topic: "Adminition-locations"
```

```
    Partition: 0
    Offset: 292
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 293
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 294
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 295
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 296
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 297
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 299
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 300
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 283
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 284
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 285
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 286
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 287
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 288
```

```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 289
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 290
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 291
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 292
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 293
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 294
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 295
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 296
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 297
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 298
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 299
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 300
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 301
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 302
```

```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 303
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 304
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 305
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 306
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 307
```

```
=====
=====
Sending Values at Time: 91.7
=====
=====
```

```
Sending:  locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 301
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 302
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 303
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 304
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 305
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 306
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 307
Message sent:
```

```
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 308
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 309
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 310
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 311
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 312
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 313
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 314
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 315
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 316
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 317
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 308
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 309
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 310
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 311
```

```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 312
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 313
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 314
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 315
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 316
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 317
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 318
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 319
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 320
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 321
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 322
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 323
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 324
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 325
```



```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 326

=====
=====
Sending Values at Time: 94.7
=====
=====
Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 318
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 319
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 320
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 321
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 322
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 323
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 324
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 325
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 326
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 327
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 328
Message sent:
```

```
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 329
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 330
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 331
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 332
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 333
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 334
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 335
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 327
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 328
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 329
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 330
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 331
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 332
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 333
```

```
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 334
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 335
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 336
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 337
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 338
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 339
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 340
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 341
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 342
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 343
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 344
```

```
=====
=====
Sending Values at Time: 98.8
=====
=====
Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 336
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
```

```
    Offset: 337
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 338
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 339
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 340
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 341
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 342
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 343
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 344
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 345
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 346
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 347
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 348
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 349
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 350
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 351
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 352
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 353
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 345
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 346
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 347
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 348
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 349
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 350
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 351
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 352
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 353
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 354
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 355
Message sent:
    Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 356
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 357
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 358
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 359
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 360
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 361
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 362
```

```
=====
=====
Sending Values at Time: 102.5
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 354
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 355
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 356
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 357
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 358
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```

```
    Offset: 359
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 360
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 361
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 362
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 363
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 364
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 365
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 366
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 363
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 364
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 365
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 366
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 367
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 368
Message sent:
    Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 369
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 370
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 371
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 372
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 373
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 374
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 375
```

```
=====
=====
Sending Values at Time: 106.0
=====
=====
```

```
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 367
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 368
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 369
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 370
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 371
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
```



```
    Offset: 372
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 373
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 374
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 375
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 376
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 376
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 377
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 378
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 379
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 380
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 381
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 382
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 383
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 384
Message sent:
    Topic: "Adminition-accelerations"
```

```
Partition: 0
Offset: 385

=====
=====
Sending Values at Time: 109.9
=====
=====

Sending:  locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 377
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 378
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 379
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 380
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 381
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 382
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 383
Sending:  accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 384
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 386
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 387
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 388
Message sent:
  Topic: "Adminition-accelerations"
```

```
    Partition: 0
    Offset: 389
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 390
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 391
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 392
Message sent:
```

```
=====
=====
Sending Values at Time: 113.2
=====
=====
```

```
Sending: locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 385
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 386
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 387
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 388
Sending: accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 389
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 394
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 395
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 396
Message sent:
```

```
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 397
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 398
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 399

=====
=====
Sending Values at Time: 117.2
=====
=====
Sending:  locations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 390
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 391
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 392
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 393
Sending:  accelerations
Message sent:
    Topic: "Adminition-locations"
    Partition: 0
    Offset: 394
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 400
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 401
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 402
Message sent:
    Topic: "Adminition-accelerations"
    Partition: 0
    Offset: 403
Message sent:
```

```
Topic: "Adminition-accelerations"
Partition: 0
Offset: 404

=====
=====
Sending Values at Time: 121.4
=====
=====
Sending: locations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 395
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 396
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 397
Sending: accelerations
Message sent:
  Topic: "Adminition-locations"
  Partition: 0
  Offset: 398
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 405
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 406
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
  Offset: 407
Message sent:
  Topic: "Adminition-accelerations"
  Partition: 0
```

```
In [15]: 1
          2 res = os.system(str(kafka_dir)+"\stop_zookeeper-server-stop.bat")
          3 print("Stop Running Zookeeper Server: ", res)
          4
          5
          6 res = os.system(str(kafka_dir)+"\stop_kafka-server-stop.bat")
          7 print("Stop Running Kafka Server: ", res)
          8
          9 time.sleep(3)
         10
         11 print("Stop the Servers")
         12
         13
```

```
Stop Running Zookeeper Server: 0  
Stop Running Kafka Server: 0  
Stop the Servers
```