

## [BD] Assignment 3-1 README

1. launch your kafka environment using the usual commands:

In one terminal window

```
bin/zookeeper-server-start.sh config/zookeeper.properties
```

In another:

```
bin/kafka-server-start.sh config/server.properties
```

2. Then create two topics. Call them test and finaltopic.

```
bin/kafka-topics.sh --create --topic test  
--bootstrap-server localhost:9092
```

```
bin/kafka-topics.sh --create --topic finaltopic  
--bootstrap-server localhost:9092
```

3. Create a directory named checkpoint at the same level as the programs you are running. I have already provided one, but in case running hw3-2 throws errors, create an empty directory named checkpoint and rerun the program twice.

4. Launch your ELK.

Logstash should be configured with the logstash.conf file given in the submission.

5. Then, run homework3-2 using:

```
sh <path_to_spark_submit> --packages  
org.apache.spark:spark-sql-kafka-0-10_2.12:3.1.1  
<path_to_homework3-2.py> <bootstrap-servers>  
<checkpoint-dir> <input-topic> <output-topic>
```

for example for us:

```
sh /Users/Hema/Library/Python/3.8/bin/spark-submit
--packages
org.apache.spark:spark-sql-kafka-0-10_2.12:3.1.1
/Users/Hema/bdhw3/partone/homework3-2.py
localhost:9092 checkpoint test finaltopic
```

Similarly, run homework3\_2\_tweet

```
sh <path_to_spark_submit> --packages
org.apache.spark:spark-sql-kafka-0-10_2.12:3.1.1
<path_to_homework3_2_tweet.py> <bootstrap-servers>
<query> <topics>
```

For us it was:

```
sh /Users/Hema/Library/Python/3.8/bin/spark-submit
--packages
org.apache.spark:spark-sql-kafka-0-10_2.12:3.1.1
/Users/Hema/bdhw3/partone/homework3_2_tweet.py
localhost:9092 covid test
```

6. Go to Kibana, create an index pattern  
(hw3\_final\_index is what you need to match to) and  
visualize in the dashboard.