

My final project is about the Chicago crime. It shows the percentage of crime happen in different weather. And display by each month. Like: 20011 represent Jan. 2001.

My data set of crime only from 2001.1 to 2017. 1. There is not value other than that.

The table name "weather\_crime\_by\_month" in the hbase shell.

My uberjar is inside "chengyuel/target". "uber-speed-layer-weather-1.0-SNAPSHOT.jar" is for the weather. And "uber-speed-layer-flights-1.0-SNAPSHOT.jar" is for crime.

Run this code and use below links. (All in one line):

```
node app.js 3030 ec2-54-166-56-39.compute-1.amazonaws.com 8070
b-2.mpcs530142022.7vr20l.c19.kafka.us-east-1.amazonaws.com:9092,b-1.mpcs530142022.7vr20
l.c19.kafka.us-east-1.amazonaws.com:9092,b-3.mpcs530142022.7vr20l.c19.kafka.us-east-1.amaz
onaws.com:9092
```

Website link: (if run in the ec2)

<http://ec2-52-73-126-153.compute-1.amazonaws.com:3030/>

Submit-weather:

<http://ec2-52-73-126-153.compute-1.amazonaws.com:3030/submit-weather.html>

Submit-crime:

<http://ec2-52-73-126-153.compute-1.amazonaws.com:3030/submit-crime.html>

To check the Weather real-time date in the kafka (All in one line):

```
kafka-console-consumer.sh --bootstrap-server
b-2.mpcs530142022.7vr20l.c19.kafka.us-east-1.amazonaws.com:9092,b-3.mpcs530142022.7vr20
l.c19.kafka.us-east-1.amazonaws.com:9092,b-1.mpcs530142022.7vr20l.c19.kafka.us-east-1.amaz
onaws.com:9092 -topic chengyuel_final_weather --from-beginning
```

To check the Crime real-time date in the kafka (All in one line):

```
kafka-console-consumer.sh --bootstrap-server
b-2.mpcs530142022.7vr20l.c19.kafka.us-east-1.amazonaws.com:9092,b-3.mpcs530142022.7vr20
l.c19.kafka.us-east-1.amazonaws.com:9092,b-1.mpcs530142022.7vr20l.c19.kafka.us-east-1.amaz
onaws.com:9092 -topic chengyuel_final_crime --from-beginning
```

spark-submit command for Weather (all in one line):

```
spark-submit --master local[2] --driver-java-options
"-Dlog4j.configuration=file:///home/hadoop/ss.log4j.properties" --class StreamWeather
uber-speed-layer-weather-1.0-SNAPSHOT.jar
b-3.mpcs530142022.7vr20l.c19.kafka.us-east-1.amazonaws.com:9092,b-1.mpcs530142022.7vr20
l.c19.kafka.us-east-1.amazonaws.com:9092,b-2.mpcs530142022.7vr20l.c19.kafka.us-east-1.amaz
onaws.com:9092
```

spark-submit command for Crime (all in one line):

```
spark-submit --master local[2] --driver-java-options  
"-Dlog4j.configuration=file:///home/hadoop/ss.log4j.properties" --class StreamFlights  
uber-speed-layer-flights-1.0-SNAPSHOT.jar  
b-3.mpcs530142022.7vr20l.c19.kafka.us-east-1.amazonaws.com:9092,b-1.mpcs530142022.7vr20  
l.c19.kafka.us-east-1.amazonaws.com:9092,b-2.mpcs530142022.7vr20l.c19.kafka.us-east-1.amaz  
onaws.com:9092
```

Load Balancers of DNS name link:

<http://chengyuel-lb-1194721955.us-east-1.elb.amazonaws.com/>

Submit fake weather real-time data

<http://chengyuel-lb-1194721955.us-east-1.elb.amazonaws.com/submit-weather.html>

Submit fake crime real-time data

<http://chengyuel-lb-1194721955.us-east-1.elb.amazonaws.com/submit-crime.html>