## **Steps to execute the application :**

## Pre-requisites :

- pyhton

- Nodejs

- kafka 3.2.3

- Spark 3.2.3

- Flask

- Reactjs

1. Make virtual environment and install the dependencies, i.e requirements.txt.

- pip install -r requirement.txt

1. Start services:
   1. Zookeeper
      1. .\bin\windows\zookeeper-server-start.bat .\config\zookeeper.properties
   2. Kafka
      1. .\bin\windows\kafka-server-start.bat .\config\server.properties
2. Start capturing the real time bitcoin transactions with web socket and publishing to kafka topic “bitcoin-1”
   1. Python web-socket-kafka.py
3. Submit the spark streaming application to run in local mode:
   1. Spark-submit spark-stream-btc.py
4. Start the Flask interface application for spark job to sink the output via REST APIs.
   1. Python app.py
5. Start the react application, for real time dashboard:
   1. cd amplify-react
   2. npm start