

## 2\_CCFD\_Consumer

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```
[ ]: from kafka import KafkaConsumer
import json
import joblib
import numpy as np
from kafka import TopicPartition
import warnings
warnings.filterwarnings('ignore')

[ ]: def json_deserializer(data):
    return json.loads(data.decode('utf-8'))

[ ]: rob_scaler = joblib.load('../models/rob_scaler.joblib')
rf_clf = joblib.load('../models/rf_clf.joblib')

[ ]: consumer = KafkaConsumer(bootstrap_servers=['localhost:9092'],
                             auto_offset_reset="earliest",
                             group_id="group-1",
                             value_deserializer=json_deserializer)

[ ]: topic = TopicPartition('topictest',0)

[ ]: consumer.assign([topic])

[ ]: for message in consumer:
    transaction = message.value
    transaction["scaled_amount"]=rob_scaler.transform(np.
    ↳reshape(transaction["Amount"],(-1,1))).reshape(-1)[0]
    del transaction['Amount']
    prediction = rf_clf.predict(np.array(list(transaction.values()))).
    ↳reshape(1,-1))
    if prediction[0]==0:
        print("Valid Transaction")
    else:
        print("Fraud Transaction*****")
```