

```

package com.mycompany.app;

import java.time.Duration;
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Properties;
import org.apache.kafka.clients.consumer.ConsumerConfig;
import org.apache.kafka.clients.consumer.ConsumerRecord;
import org.apache.kafka.clients.consumer.ConsumerRecords;
import org.apache.kafka.clients.consumer.KafkaConsumer;
import org.apache.kafka.common.serialization.StringDeserializer;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

/**
 * Class: 44-517 Big Data
 * Author: Niharica Myla
 * Description: The project is about finding out the smokers and
checking their temperature to find if they need attention or not
as well as planning their particular meal temperature.
 * Due: 11/11/2022
 * I pledge that I have completed the programming assignment
independently.
I have not copied the code from a student or any source.
I have not given my code to any other student.
I have not given my code to any other student and will not
share this code
with anyone under any circumstances.
 */

public class Consumer {

    public static void main(String[] args)
    {
        String bootstrapServers = "localhost:9092";

        Properties properties= new Properties();

        properties.setProperty(ConsumerConfig.BOOTSTRAP_SERVERS_CONFIG,
bootstrapServers);

        properties.setProperty(ConsumerConfig.KEY_DESERIALIZER_CLASS_CONFIG, StringDeserializer.class.getName());

        properties.setProperty(ConsumerConfig.VALUE_DESERIALIZER_CLASS_CONFIG, StringDeserializer.class.getName());
        properties.setProperty(ConsumerConfig.GROUP_ID_CONFIG,
"console-consumer-myapp");

        KafkaConsumer<String, String> consumer = new
KafkaConsumer<>(properties);
        consumer.subscribe(Arrays.asList("quickstart"));
    }
}

```

```

        while(true) {
            ConsumerRecords<String, String> records =
consumer.poll(Duration.ofMillis(100));
            for (ConsumerRecord<String, String> record: records)
            {
                String a11 =
record.value().substring(record.value().lastIndexOf(bootstrapServ
ers));

                String b11 = a11.substring(10);
                double c11 = Double.parseDouble(b11);
                System.out.println(c11);
                System.out.println(record.topic() + ", " +
record.key() + ", " + record.value());
                ArrayList<Double> now = new ArrayList<Double>();
                for (int i= 0; i< now.size(); i++) {
                    now.add(c11);
                    System.out.println(now.get(i));

                    if(record.key().equals("ch001")) {
                        for(i= 0; i<now.size();i++){

System.out.println(record.key()+now.get(now.size()-1));
                            if(now.size()>5){
                                if((now.get(i+5)-now.get(i))<10){
                                    System.out.println("alert!");
                                }
                            }
                        }
                    }
                }
            }
        }
    }
}

/*-
%sql
select Channel2 from smoker_temps where Channel1 < 65 and
Time(UTC) < 2;

*/

```