Kafka Streams Exercise

Exercise 1:

1. Create postgresql table named shoppers\_<your id>

That table will contain 10 rows, each row will include:

Id: number in range 21 to 30

First\_name: random string

Last\_name: random string

1. Create kafka connect source connector that reads from this table.

notes:

* Make the value to be json and not avro
* Think how and if you should extract the key from the value.
* Search how to emit the schema from the message.

1. Create stream app that:
   1. Reads the data from the postgresql table (the topic your connector wrote to).
   2. Read from the first’s exercises topic.
   3. Join that data based on the shopper id
   4. Filter the joined stream to contain only records that the first\_name of the shopper in the record starts with a.
   5. Write the output to destination topic (shoppersA-<your\_id>).

Exercise 2:

1. Create stream app that:
   1. Reads the data from the previous topic (shoppersA-<your\_id>).
   2. group the data based on the item\_id.
   3. Outputs to a new topic the how many times each item id appeared in a window of 10 seconds.