1. Graphical user interface, text

   Description automatically generated
2. 
3. **Agenda**:
   1. Timestamp.
4. 
5. The ProducerRecord takes optional field Timestamp.  
   Graphical user interface, diagram

   Description automatically generated
6. Even though it is optional still for a real time streaming app, it is the most critical value.
7. That is why in Kafka, every msg is automatically timestamped if you don’t even explicitly specify it.
8. **Kafka allows you to implement one of** these two types of msg timestamping mechanisms.
   1. **Create Time**: When msg is produced.
   2. **Log Append Time**: When msg is received at kafka Server side.

**NOTE**: We can’t use both. While creating the topic, our app should decide b/w the two timestamping methods..

1. Set **message.timestamp.type** = 0 which is topic configuration for Create time or   
   Set **message.timestamp.type** = 1 for using Log Append Time. Default is 1.
2. When it is Create time, there are two ways to set time.
   1. Either Producer API set or
   2. Developer set via ProducerRecord.timestamp.
3. When Log Append Time is set, the timestamp set by producer somehow is overridden by broker with its local timestamp.
4. I prefer to use Create Time as default when using some producer api to bring data to Kafka because Producer API automatically assign a timestamp.