1. **What is Kafka**?  
     
   Chart, diagram

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   1. Kafka can have various definitions based on how we’re using it.
   2. But very popular definition is 🡺 Kafka is a **Distributed Commit Log**.
   3. As **events** occur in a MS, the MS puts those **events** onto **a log.  
      Apache Kafka is a system for managing these logs.**The famous and popular term for these logs is **Topic**.
   4. Kafka stores those events in **an orderly fashion**.
   5. It also writes those events to a disk.  
      Not to one disk, Kafka can replicate them across disks to ensure that the messages or events are not lost.
   6. Microservices share these events through these Topics or streams in real time.  
      Since Data/Events can be processed as soon as they are produced, we can have **Realtime Analytics**. So, we can do recommendations or make decisions based on these **analytics**.

Chart, waterfall chart, funnel chart

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* 1. **Streaming API:**
     1. MSs don’t just read the data from a Topic and send to another MSs. Rather they have their own computational logic.   
        That is where Kafka Streaming API comes into picture.
     2. With this Kafka Streaming API, we can group, aggregate, filter, join Data from the Topic inside a MS.

Chart, diagram

Description automatically generated

* 1. **Kafka Connect**:
     1. Suppose, you want to fetch or send data from/to some data source, you can use Kafka Connect.
     2. Kafka connect can be easily configured into our app.
     3. For Kafka Connect, we don’t need to write any code.
     4. There are hundreds of open source, uncommercial kafka connecters readily available.  
        These connecters help us to send data to data-source and vice versa in a declarative manner without any code.