1. Introduction
   1. It is a publish-subscribe messaging system which let exchanging of data between applications or services.
2. Producers
   1. Producers create messages and send them to topics
   2. Data or records are published to the topics by the producers
   3. They can also assign partition and then it is publishing data to the topic
3. Kafka Cluster
   1. Kafka Cluster is occupied from Kafka broker
4. Kafka Broker
   1. The broker is Kafka server
   2. It act as message broker between producers and consumers
   3. Both producer and consumer use Kafka broker to exchange messages
   4. Each broker has topic or topics which contains all the data or records
5. Topics
   1. In Kafka, the word topic refers to a category or a common name used to store and publish a particular stream of data.
   2. Each record in the topic is stored with a key volume and timestamp
   3. The topics can have one or multiple consumers or subscribers
6. Record or Data
   1. A record will be published in a single partition of a topic
7. Partition
   1. Producers can choose the partition in which a record will be sent otherwise the partition is chosen by Kafka
   2. The partition maintains the order in which data was inserted, and once the record is published to the topic, it remains there depending on the retention period. The records are always abandoned at the end of the partitioned.
   3. It maintains a flag called offset, which unique identifies each record within the partition
8. Consumers
   1. Consumers consume the records from the topic
   2. They are based on the concept of a consumer group where some of the consumers are assigned in the group
   3. The record we just published to the topic is only delivered to one instance of the consumer from one consumer group
   4. Kafka internally uses a mechanism of consumer records inside the consumer group
   5. Each instance of the consumer will get hold of the particular partition, such that within a consumer group the records can be processed correctly by each consumer.
9. Zookeeper
   1. Zookeeper is used by Kafka to store meta data, Kafka is distributed system and is build to use zookeeper
   2. It is used to maintain coordination between different nodes in cluster