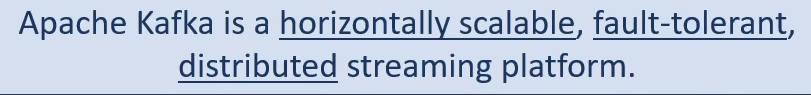
1. **Agenda**:
   1. In this section, we’re going to understand Kafka **internals and some architectural concepts**.  
      **NOTE**: These fundamental concepts are critical for the rest of the course.
2. Let’s get started.



1. You must be categorically sure about the answer.
2. Apache Kafka is **Messaging Broker**.
3. Everything else is an API, Library, Framework to interact with Kafka Broker or to work with Data in realtime.
4. Kafka Broker is a middleman b/w the Producers and Consumers playing three Primary Responsibilities.
   1. Graphical user interface, text, application

      Description automatically generated
   2. Text

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      Storage is also critical to ensure that a consumer can consume it later.   
      So that a consumer need not necessarily read it in realtime.
   3. A picture containing text

      Description automatically generated
5. Till now, this is the simplest answer to “What is Apache Kafka”.  
   A more elaborated answer can be something like
6. 

It is consciously designed to build realtime streaming data architecture.  
This new definition has a lot to understand.  
Let’s break it into 3 parts.  
Text

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* 1. In the first part, we will talk about **Kafka Message Storage Architecture**.  
     This discussion will help you to understand some core concepts such as **Topics, Logs, Partitions, replication Factors, segments, offset, offset-index**.
  2. Then we will move to **Kafka Cluster Architecture** which will help you to understand some concepts associated with **cluster formation, Zookeeper & Controller**.
  3. Finally, we will tie up these two architectures (Storage and Cluster) and try to understand how the work is **distributed** in the Kafka Cluster.  
     In this part, we will learn about **Leaders, Followers, In Sync Replica, Committed and Uncommitted Messages**.

1. A picture containing graphical user interface

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2. In the next lecture, we will learn about **Kafka Storage Architecture**.