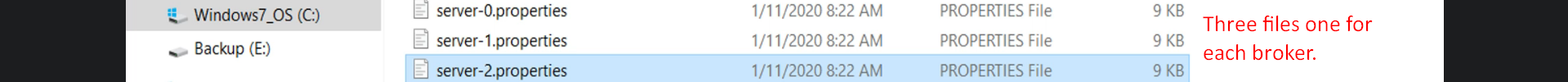
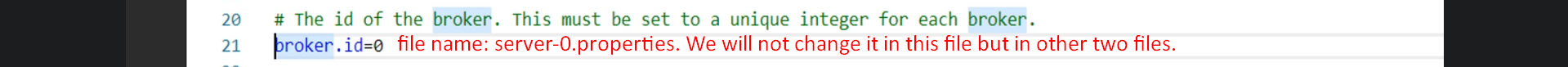
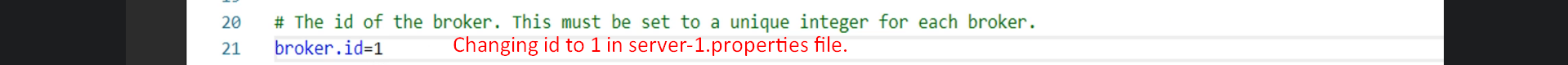
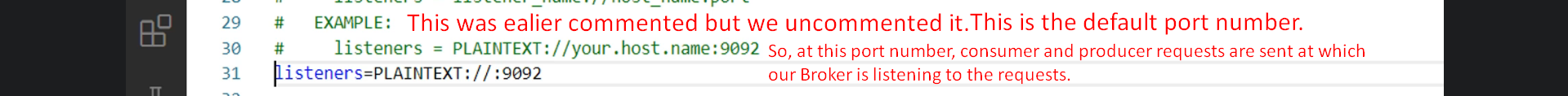
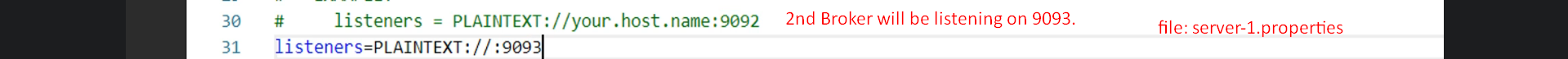
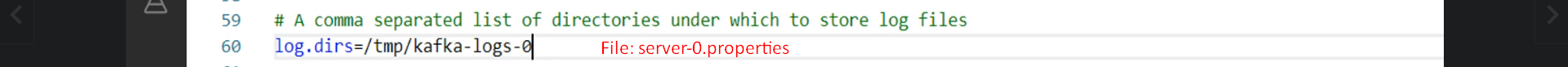
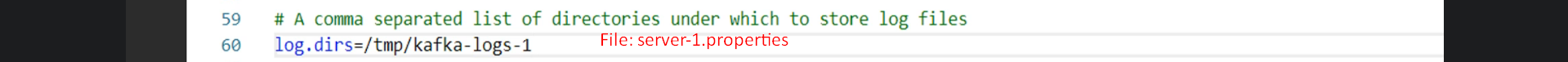
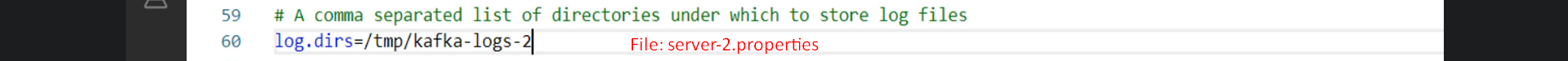
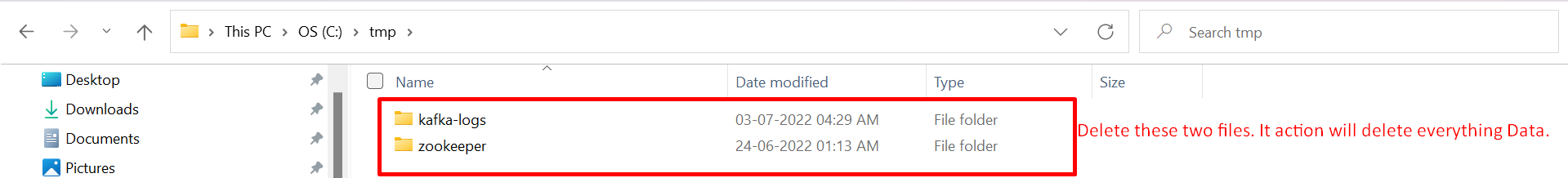
1. Diagram

   Description automatically generated
2. We will be using **Confluent Community Edition** for this demonstration.  
   However, the same steps apply for the **Kafka Open-Source** as well.
3. Let’s start.
4. 
   1. This is **Kafka Configuration File**.
   2. When you start **Kafka Broker**, you supply this file **as an argument**.  
      **Command 🡺 kafka-server-start.bat etc\kafka\server.properties**
   3. As we want to start **three** **Kafka Brokers**, so let’s make three copies of this file and give a different name to all of them.   
      
   4. As each **kafka** **Broker** must run on a different port if we’re running all of them on the same machine, so let’s modify.  
      **Kafka** is highly **configurable system**, and you can define many of those **configurations** in this **server.properties file**.  
      Some of those **configurations** are already set in this **pre-configured file** (**server-0.properties**) and you can override them and add others too.  
      Let’s makes changes in **server-0.properties file**.
      1. **broker.id=0**  
         Each **Kafka Broker** must have a **unique id**.  
           
         Let’s make this change in server-1.properties & server-2.properties files  
          
      2. **listeners=PLAINTEXT://:9092**The below configuration is for file **server-0.properties**.  The **3rd Broker’s** file **server-2.properties** must have **listeners=PLAINTEXT://:9094**  
         But in real scenario, you will be launching one **Broker** on one Machine.  
         In that case, we don’t need to change port number.
      3. **log.dirs=/tmp/kafka-logs:**This is the location where **Kafka Broker** is going to store the **partition data**.  
         When you running multiple **Brokers** on the same machine, then you need to **assign different directory** to each **Broker**.  
            **NOTE: There are other configurations in this file but will not change them as they will not conflict with each other.**We changed only **broker-id, listeners, log-dirs** in **server.properties** just to make sure that they don’t conflict with each other when running all the three brokers on the same machine.   
         When you run one broker one machine, then you don’t need to change anything except **broker-id**. But you can avoid that too by configuring Kafka to **auto-assign identifier** to each **Broker**.  
         We will save it for other lecture.
5. So, we are all set to start a **Kafka Cluster** of three **Kafka Brokers** on a single machine.  
   Steps are the same as we did for a Single Broker.
   1. **Step 01**: Start the **Zookeeper**.  
      Before staring the **Zookeeper**, we need to clean up the directory.  
      As earlier, we sent some data and now we want to start fresh. The most straightforward methods to do that is to delete the **Kafka log Dir** and **Zookeeper Data Dir**.  
      Graphical user interface

      Description automatically generated with medium confidence  
        
      Now, let’s run the **Zookeeper**.  
      
   2. **Step 02:** Star the three Brokers  
      