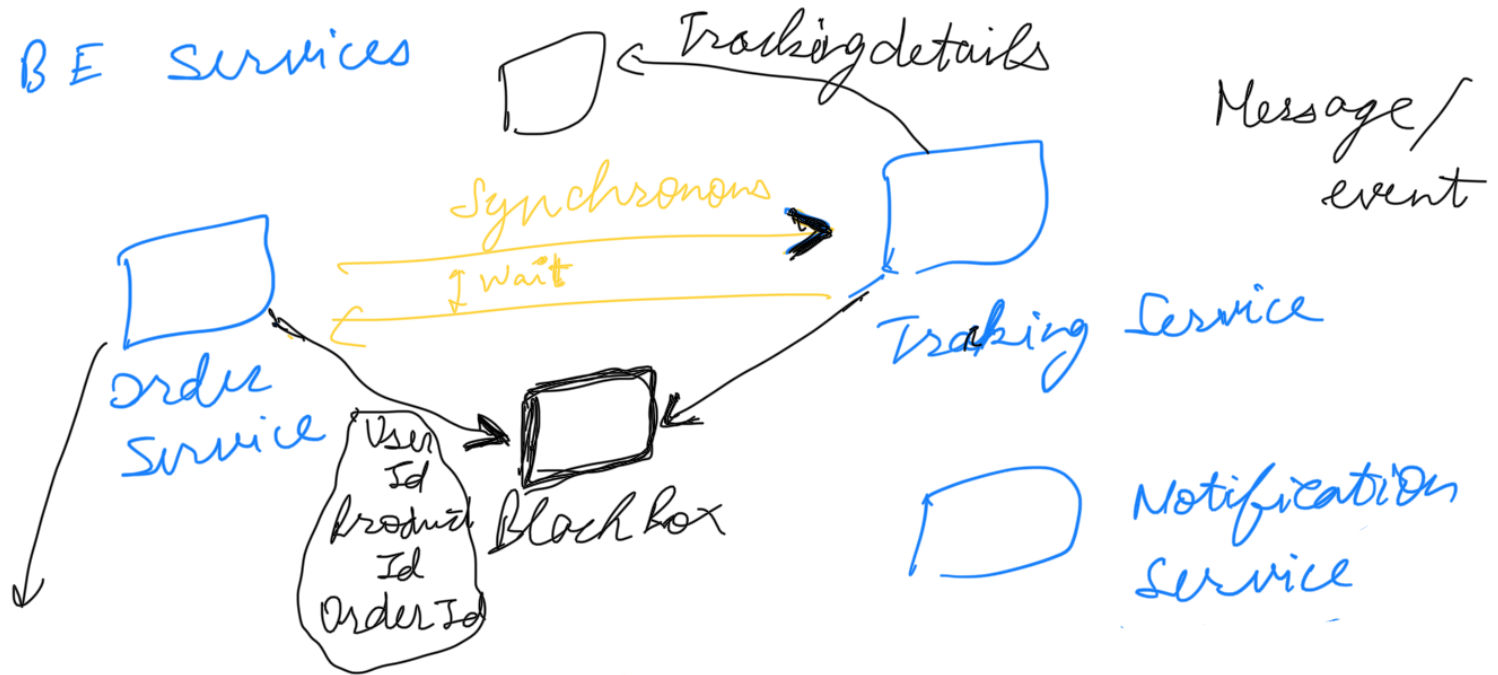


Kafka

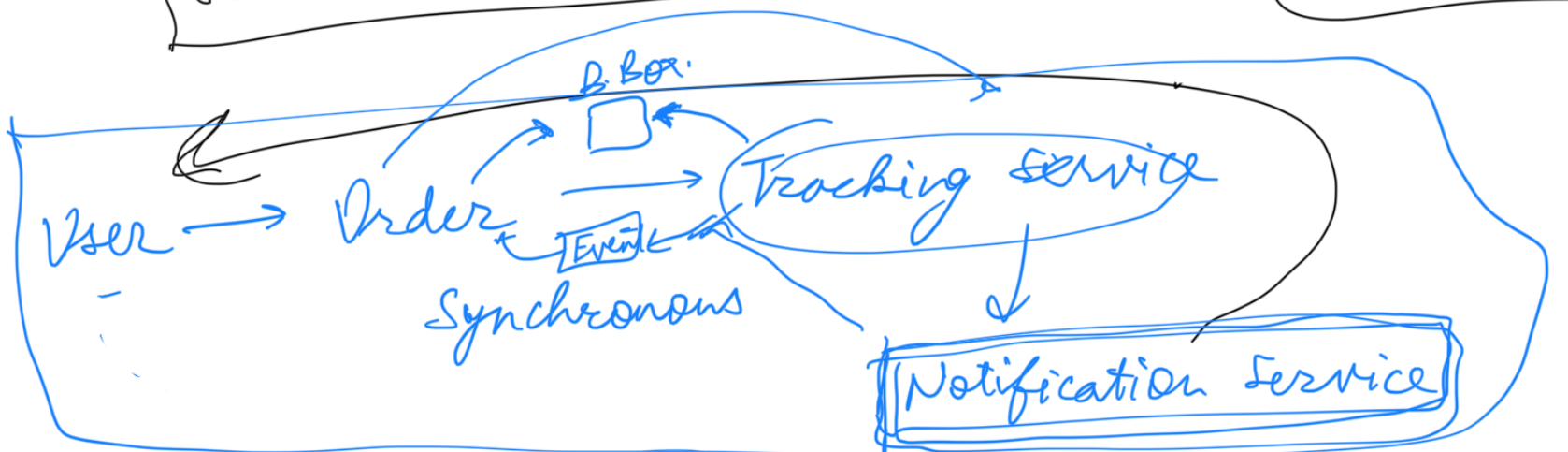
2 B E services



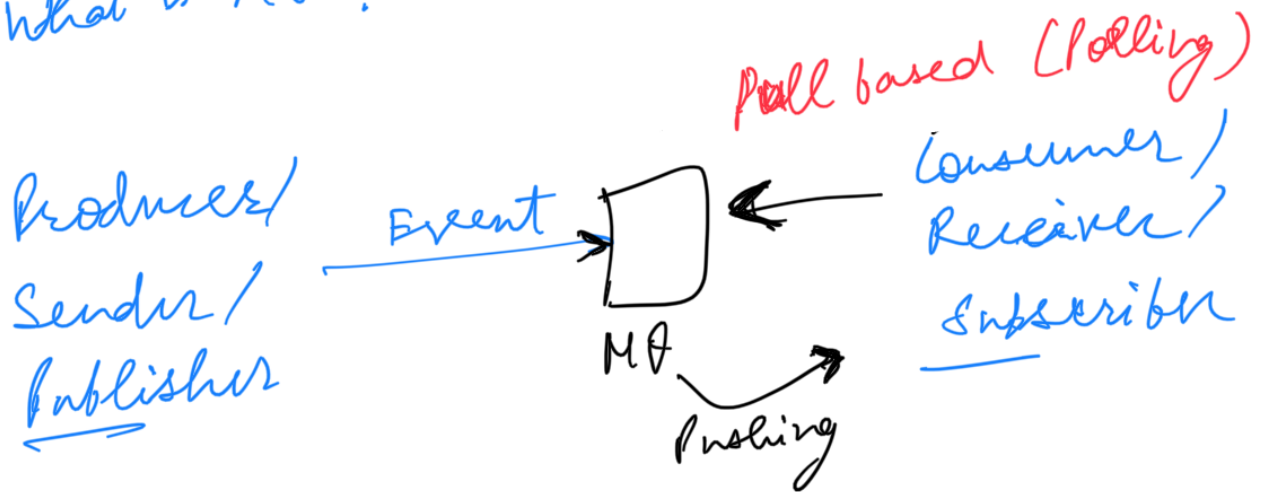
Synchronous behaviour

Asynchronous behaviour → Message Queue
Pub-Sub Model

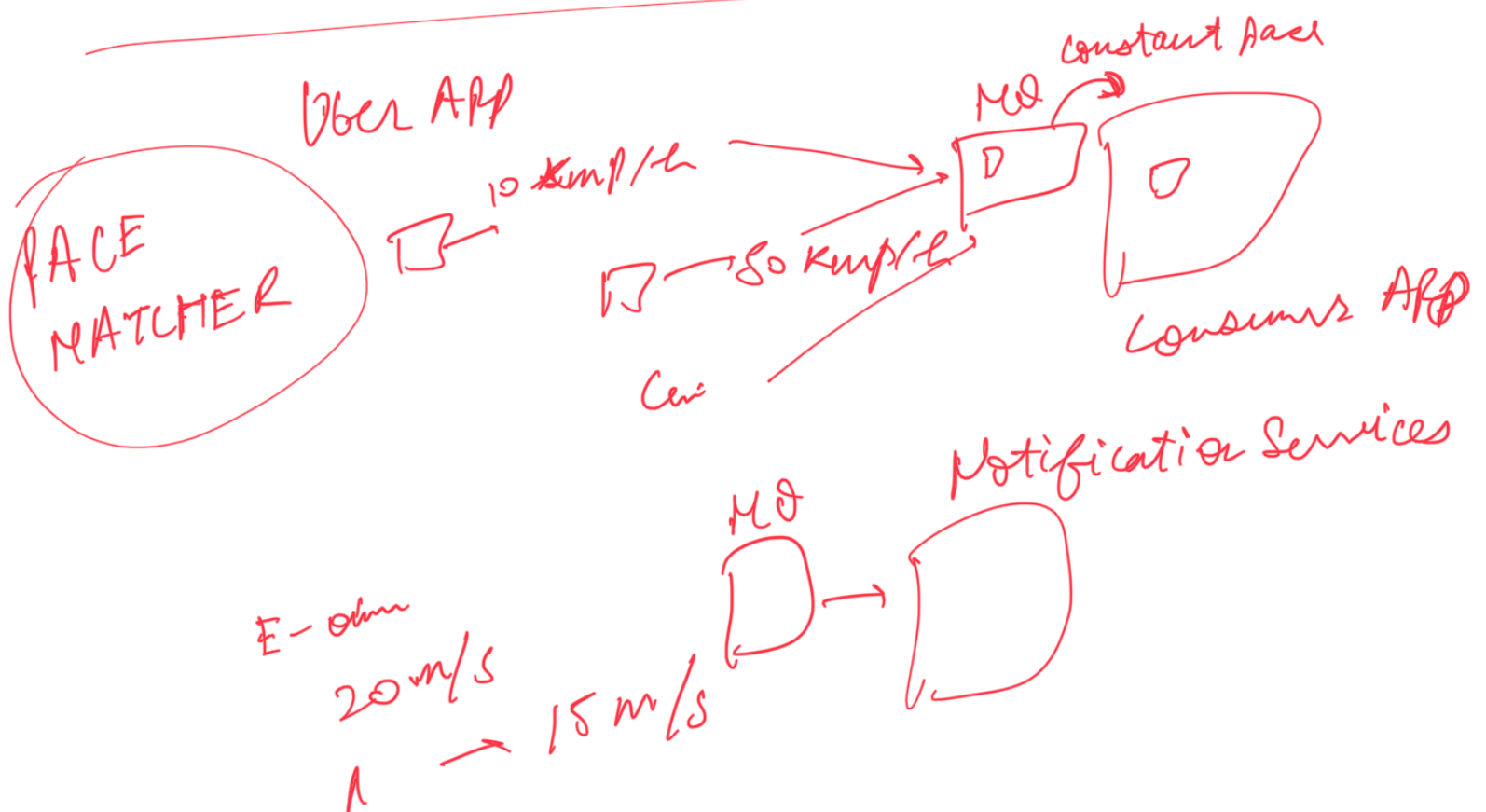
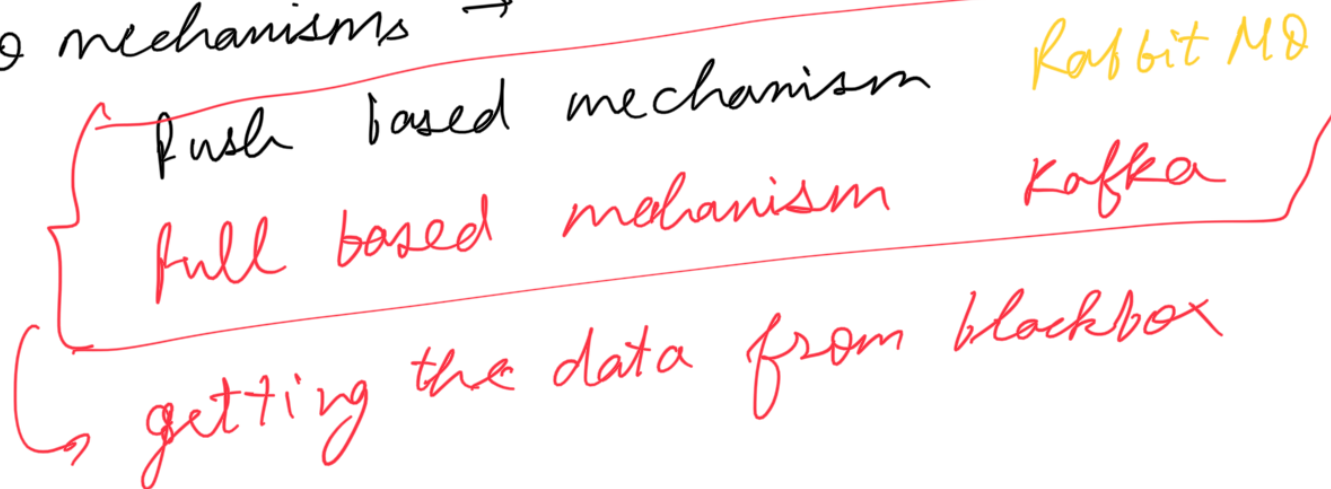
Kafka is a tool which provides mechanism so that multiple services can communicate asynchronously



① what is MQ? Kafka



Two mechanisms →

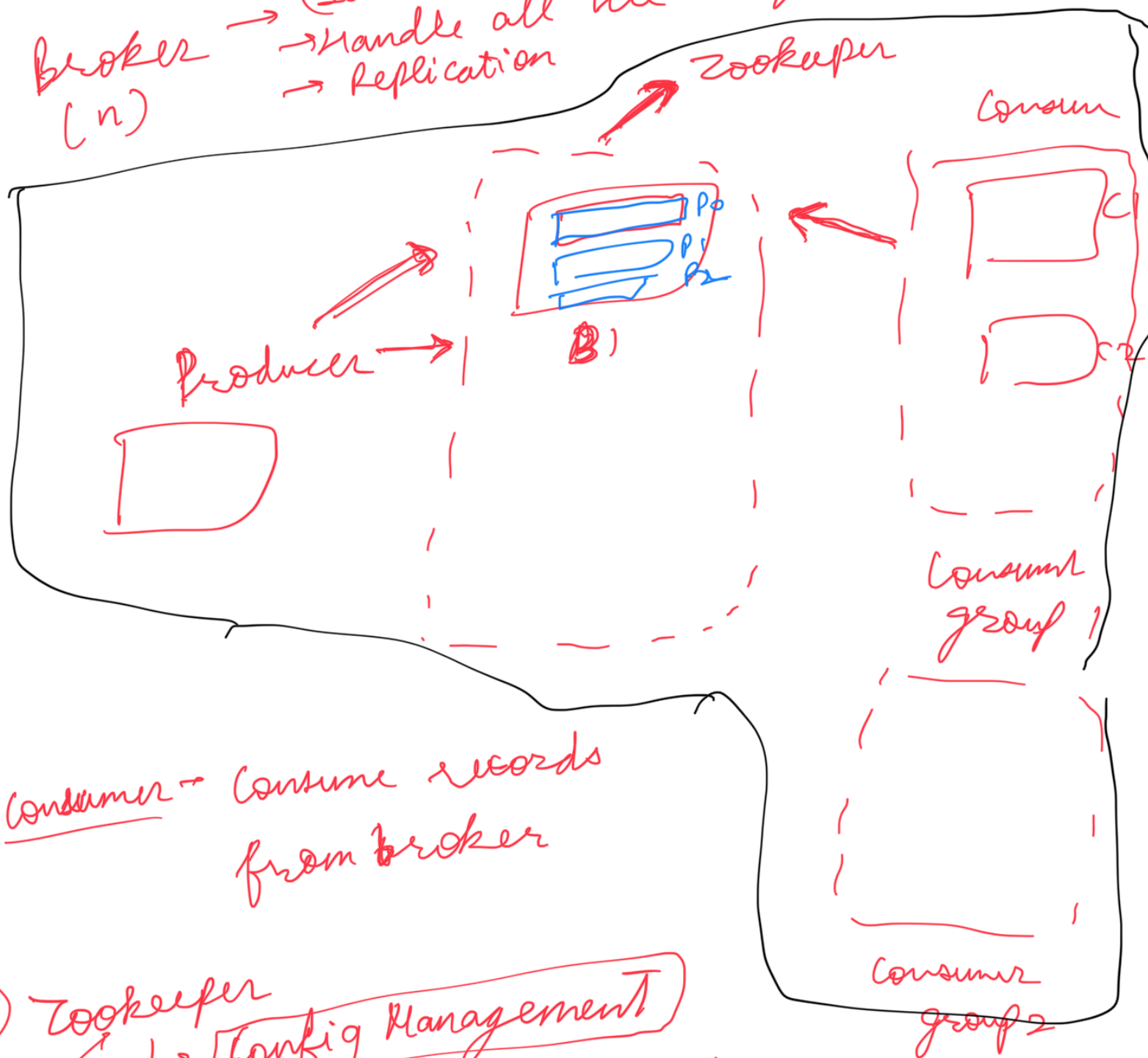


Kafka →

Components →

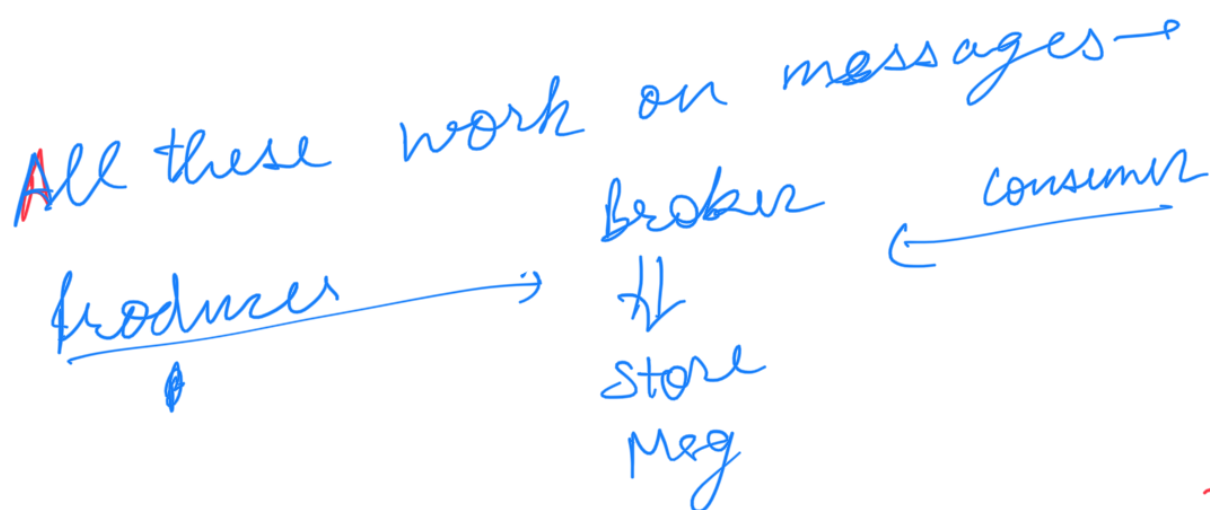
1. Producer

- ① Producer → Send msgs to a broker / (server)
- ② Broker (n) → Handle all the requests from clients
→ Replication



- ③ Consumer → Consume records from broker

- ④ Zookeeper
 - ↳ Config Management
 - ↳ How many servers are running
 - ↳ ...



- ⑤ Partition → data structure (Queue)

Type of msgs

- ① Order - Created
- ② User - Created

User Service



Notification Service

Topics → Category or a type



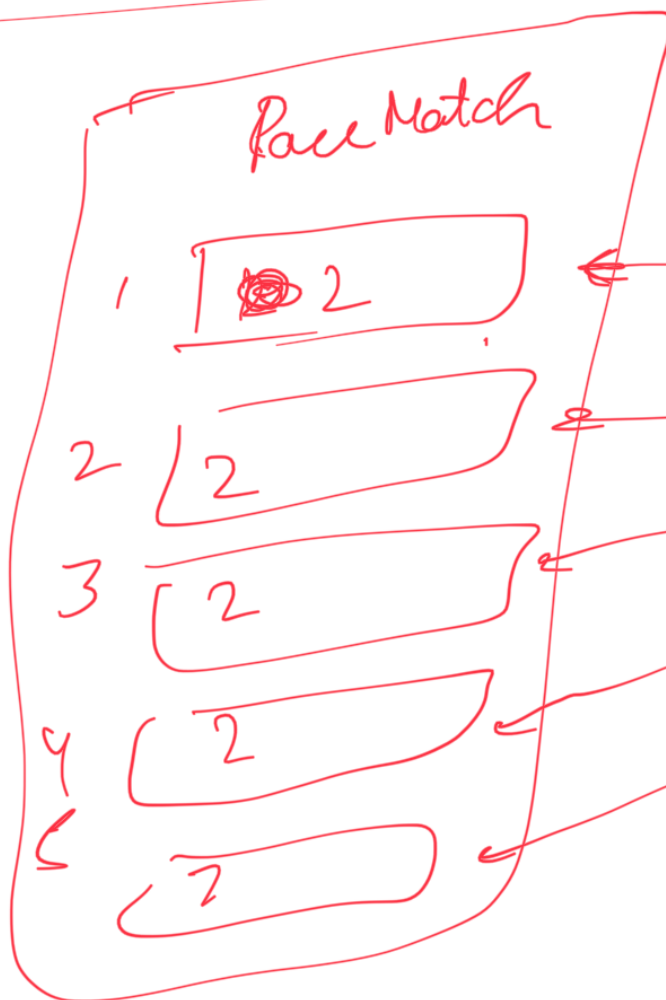
Rate of Prod

10 msg/sec

P₁



Rate Match



Rate of consen

R_c

C₁ → 2 msg/sec

No

C₂

C₃

C₄

C₅