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Web Development 2

Exercise F

1. What's the difference between replication & sharding, Illustrate your answer with motivation, architectures etc.  
     
   Replication is a concept that is derived from RIAD backups. It takes a collection and replicates it across multiple (an odd number) servers to keep the data accessible and editable in case of a server failure.   
     
   Sharding is where you break up the data storage to multiple servers to keep the server resources on any given server minimal. This enables the data storage to be kept at manageable levels.
2. What are the similarities, if any?  
     
   The similarities are only in the commands to run the mongod and mongosh commands. Outside of that they are two used for two separate purposes and conceptions.
3. Can you run sharding and replcation simultaneously for the same collection? Why? or why not?  
     
   It is possible to combine the two together. In combining the two methods together you get a redundancy and spread of data. This has the benefit of using both methods and the drawback of setup time and maintenance of both at the same time. Synchronization is key when using both.