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Cs 149 – 3
HW#8

Problem 1

a.is a data storage made for storing, retrieving, and managing arrays.

b. That can pretty much never fail and can work 100% of the time.

c. It uses the vector clocks to keep the current version the same giving it the information for

d.D1(sx,1) D2(sx,2) D3(sx,2 [sy,1]) D4([sx,2], [sz,1])
D5([sx,2], [sy,1], [sz,1])

e. dynamo seems to focus on no failure rate and available over consistency. So it takes the and P for the cap theorem.

f. They picked Available of consistency because they want the users to be extremely reliable for the consumers and always be usable with little crashing and errors.

g. That under the high loads that the website will have to keep the highest amount of availability they need a different form of hashing to help.

h. Their solution is using a token per node equal sized portions because this solution works with how many partitions and has a fast recovery and archival of a data set.

Problem 2

a.3PC uses a server to communicate through.

Both voters communicate with server room
Sends conversation to the server and sends it though to other voters.

b. A protocol that would work is that if you just disconnect that voter that times out and continue without him and reconnect him to the current state when the voter comes back.

c. All of the voter's time out because the coordinator crashes with the one that times out.

d. either if one of the reserves goes down it can case a crash or if the central server loses information or crashes and loses the single. Making it crash.
Also if the server is not trusted it can be unsafe conversation. Making unsafe server have vison over your conversation.