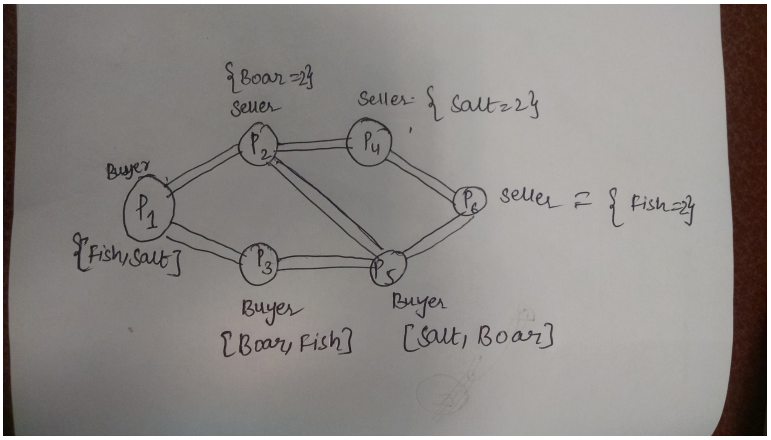
Test Case:(Network topology)



Program Output:

P1 : Initiating the Lookup Process for Fish
P3 : Initiating the Lookup Process for Boar
P5 : Initiating the Lookup Process for Salt
P3 :I'm Buyer, I will forward the request for Fish to my neighbors.
P2 : I don't have Fish I will forward the request to my neighbors.
P1 :I'm Buyer, I will forward the request for Boar to my neighbors.
P5 :I'm Buyer, I will forward the request for Boar to my neighbors.
P2 : I don't have Salt I will forward the request to my neighbors.
P3 :I'm Buyer, I will forward the request for Salt to my neighbors.
P6 : I don't have Salt I will forward the request to my neighbors.
P4 : I don't have Fish I will forward the request to my neighbors.
P5 :I'm Buyer, I will forward the request for Fish to my neighbors.
P2 : I have the Boar
P6 : I don't have Boar I will forward the request to my neighbors.
P1 :I'm Buyer, I will forward the request for Salt to my neighbors.
P4 : I have the Salt
P6 : I have the Fish
P4 : I don't have Boar I will forward the request to my neighbors.
P3 : Bought Boar from P2
P1 : Bought Fish from P6
P5 : Bought Salt from P4
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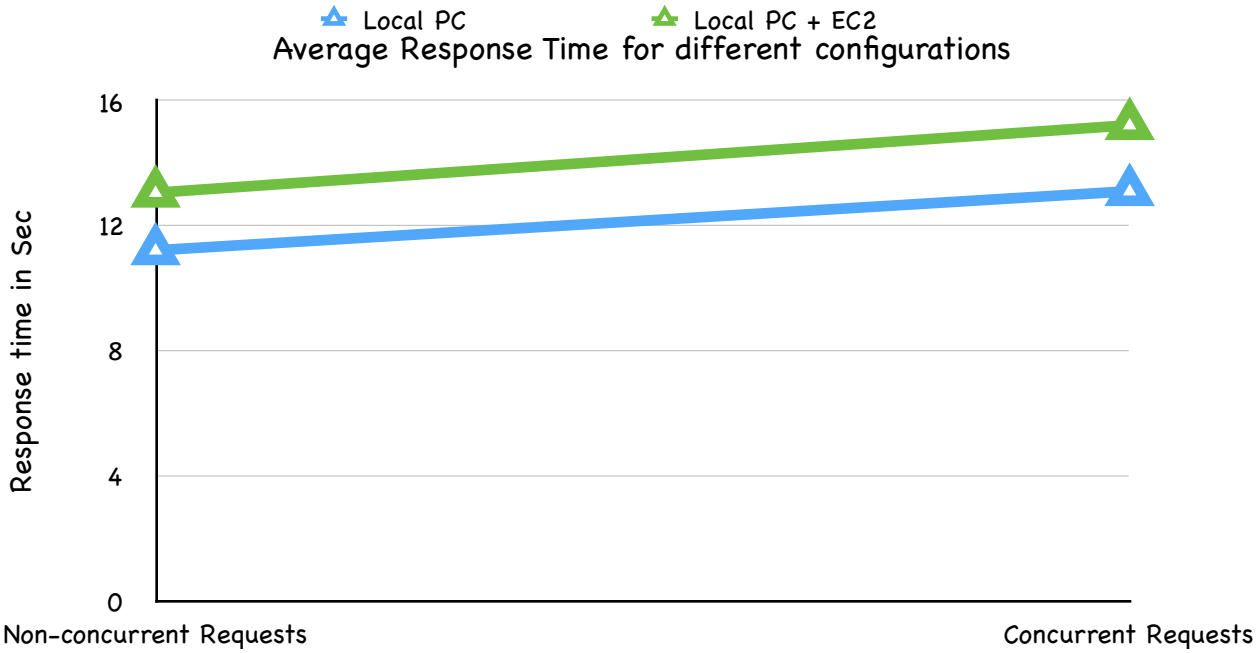
P3 : Initiating the Lookup Process for Fish
P1 : Initiating the Lookup Process for Salt
P5 : Initiating the Lookup Process for Boar
P1 :I'm Buyer, I will forward the request for Fish to my neighbors.
P5 :I'm Buyer, I will forward the request for Fish to my neighbors.
P2 : I don't have Salt I will forward the request to my neighbors.
P3 :I'm Buyer, I will forward the request for Salt to my neighbors.
P2 : I have the Boar
P6 : I don't have Boar I will forward the request to my neighbors.
P3 :I'm Buyer, I will forward the request for Boar to my neighbors.

P2 : I don't have Fish I will forward the request to my neighbors.
P6 : I have the Fish
P4 : I have the Salt
P5 :I'm Buyer, I will forward the request for Salt to my neighbors.
P4 : I don't have Boar I will forward the request to my neighbors.
P1 :I'm Buyer, I will forward the request for Boar to my neighbors.
P4 : I don't have Fish I will forward the request to my neighbors.
P6 : I don't have Salt I will forward the request to my neighbors.
P3 : Bought Fish from P6
P1 : Bought Salt from P4
P5 : Bought Boar from P2

Evaluation Results:

Average Response times provided are time required per hop.(Average Response time was computed by dividing the response time of each lookup request to number of hops/request forwarded and including reply traversals for that request.)



When peers are hosted in local machine only, average response times were approximately 13ms for concurrent requests and where as for non-concurrent requests it was around 11.2 ms, this shows that as the concurrency is introduced, average response go up. Similarly, when some peers hosted in local machine and some on EC2, response times were 10-30% more compared to former case.