Lab 02: Hazelcast

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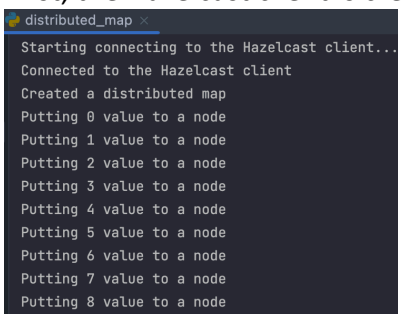
Code (branch): *hazelcast_practice*

Task 1: Creating Nodes

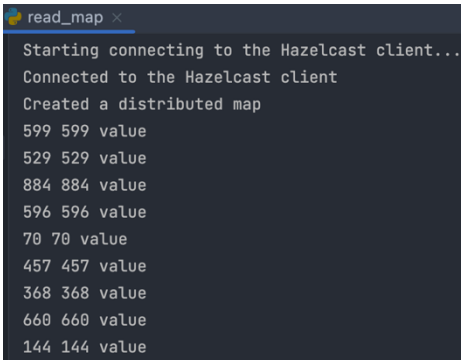
First step is to create and setup the 3 members for a cluster

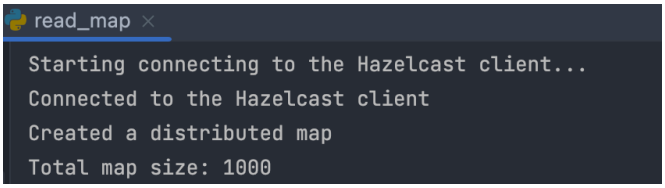
Task 2: Distributed Map

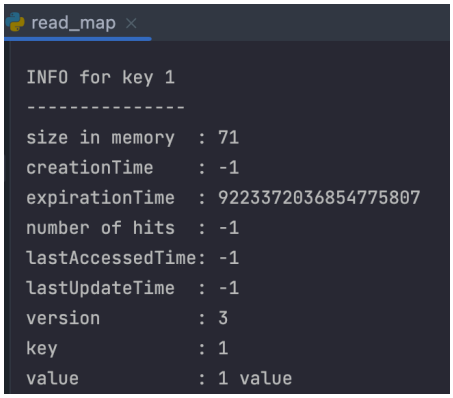
First, the Hazelcast client is created along with the distributed map with added 1000 values



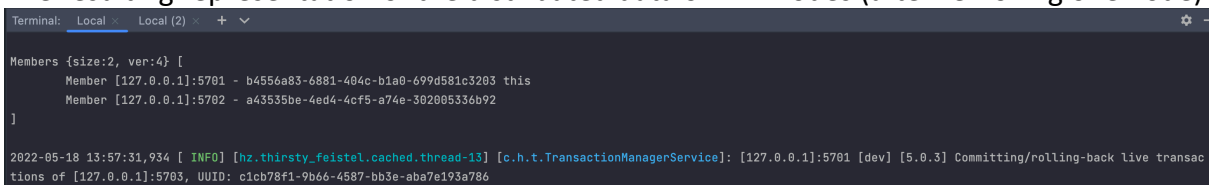
The initial representation of the distributed data on n nodes
(The main idea is to continue storing all the information on all the nodes)

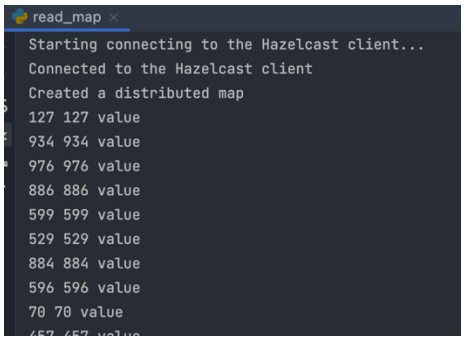


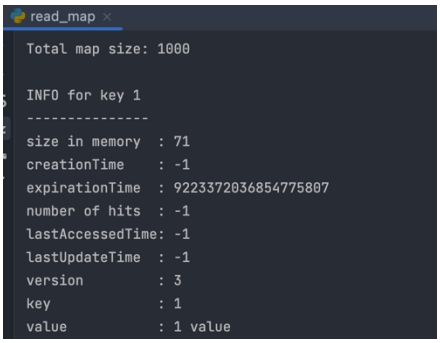




The resulting representation of the distributed data on n-1 nodes (after removing one node)

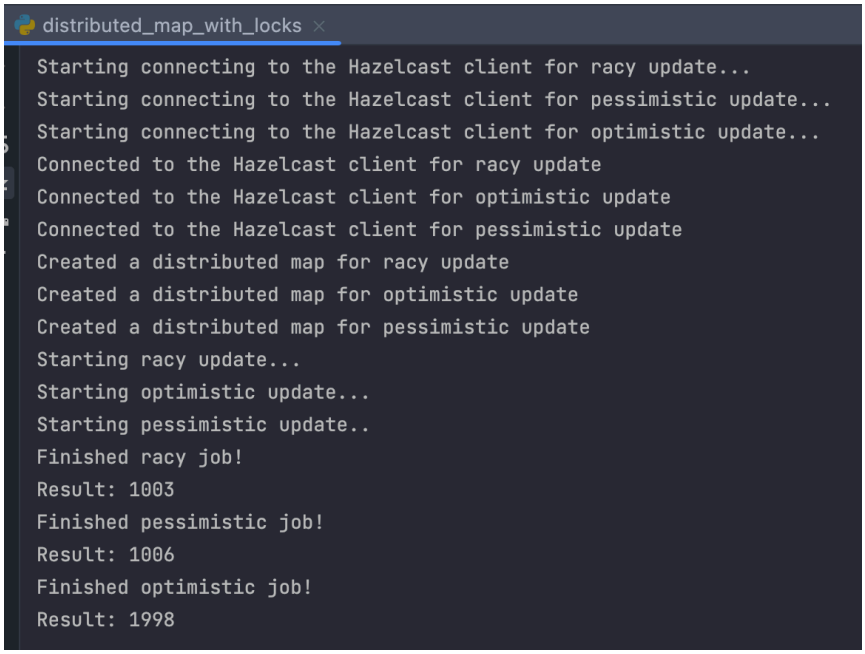




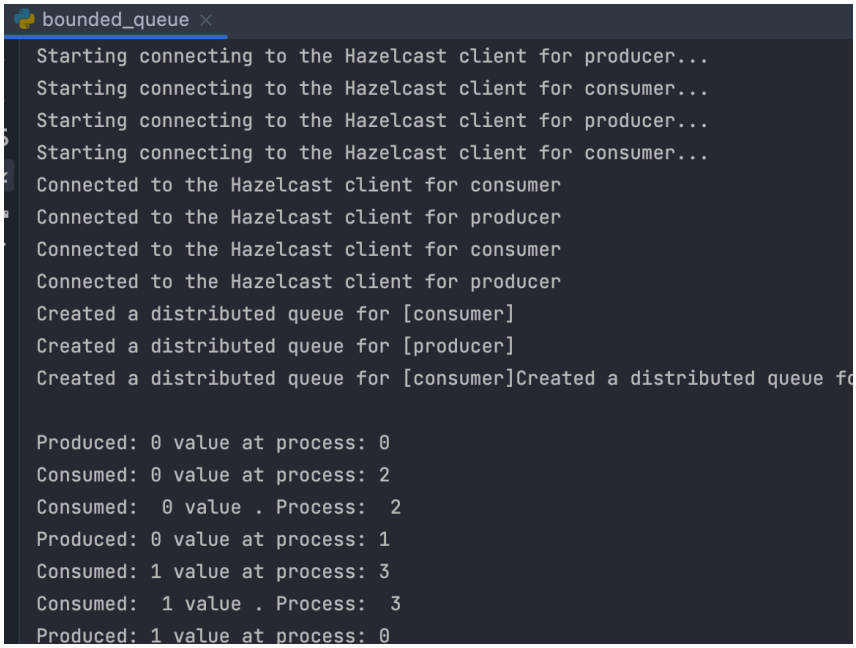


Here we see that all the initial data is stored (all 1000 values)

Task 3: Distributed Map with Locks



Task 4: Bounded Queue


bounded_queue
Starting connecting to the Hazelcast client for producer...
Starting connecting to the Hazelcast client for consumer...
Starting connecting to the Hazelcast client for producer...
Starting connecting to the Hazelcast client for consumer...
Connected to the Hazelcast client for consumer
Connected to the Hazelcast client for producer
Connected to the Hazelcast client for consumer
Connected to the Hazelcast client for producer
Created a distributed queue for [consumer]
Created a distributed queue for [producer]
Created a distributed queue for [consumer]Created a distributed queue fo
Produced: 0 value at process: 0
Consumed: 0 value at process: 2
Consumed: 0 value . Process: 2
Produced: 0 value at process: 1
Consumed: 1 value at process: 3
Consumed: 1 value . Process: 3
Produced: 1 value at process: 0