

## Lab3

### Outputs - Raft

For Raft testing, we conducted experiments with no crash failures functioning correctly simulating a client with 10 requests and no probability.

client.py

```
Request: 6
Query TOY: Elephant
Toy URL: http://localhost:4773/product/Elephant
Toy Lookup Response: {'data': {'name': 'Elephant', 'price': 25.99, 'quantity': 26}}
Order request: {'name': 'Elephant', 'quantity': 20}
Buy Request Response: {'data': {'order_number': 4}}

Request: 7
Query TOY: Whale
Toy URL: http://localhost:4773/product/Whale
Toy Lookup Response: {'data': {'name': 'Whale', 'price': 10.89, 'quantity': 76}}
Order request: {'name': 'Whale', 'quantity': 9}
Buy Request Response: {'data': {'order_number': 5}}

Request: 8
Query TOY: Dolphin
Toy URL: http://localhost:4773/product/Dolphin
Toy Lookup Response: {'data': {'name': 'Dolphin', 'price': 15.99, 'quantity': 82}}
Order request: {'name': 'Dolphin', 'quantity': 11}
Buy Request Response: {'data': {'order_number': 6}}

Request: 9
Query TOY: Marbles
Toy URL: http://localhost:4773/product/Marbles
Toy Lookup Response: {'data': {'name': 'Marbles', 'price': 36.78, 'quantity': 19}}
Order request: {'name': 'Marbles', 'quantity': 10}
Buy Request Response: {'data': {'order_number': 7}}
Total lookup request: 10
Average lookup request latency: 0.07385189533233642
Total order request: 8
Average order request latency: 0.10523813962936401
gargeeshah@Gargees-MacBook-Air load_test %
```

Log files for all 3 replicas

```
src > Order > ⌵ log1.txt
```

1	Index	Timestamp	Term	Event Type	Details
2	2024-05-04	23:39:44	1	ORDER REQUESTED	Dolphin,22.0
3	2024-05-04	23:39:45	1	ORDER REQUESTED	Lego,19.0
4	2024-05-04	23:39:46	1	ORDER REQUESTED	Tux,39.0
5	2024-05-04	23:39:49	1	ORDER REQUESTED	Elephant,29.0
6	2024-05-04	23:39:50	1	ORDER REQUESTED	Elephant,20.0
7	2024-05-04	23:39:51	1	ORDER REQUESTED	Whale,9.0
8	2024-05-04	23:39:53	1	ORDER REQUESTED	Dolphin,11.0
9	2024-05-04	23:39:54	1	ORDER REQUESTED	Marbles,10.0
10					

```
src > Order > ⌵ log2.txt
```

1	Index	Timestamp	Term	Event Type	Details
2	2024-05-04	23:39:44	1	ORDER REQUESTED	Dolphin,22.0
3	2024-05-04	23:39:45	1	ORDER REQUESTED	Lego,19.0
4	2024-05-04	23:39:46	1	ORDER REQUESTED	Tux,39.0
5	2024-05-04	23:39:49	1	ORDER REQUESTED	Elephant,29.0
6	2024-05-04	23:39:50	1	ORDER REQUESTED	Elephant,20.0
7	2024-05-04	23:39:51	1	ORDER REQUESTED	Whale,9.0
8	2024-05-04	23:39:53	1	ORDER REQUESTED	Dolphin,11.0
9	2024-05-04	23:39:54	1	ORDER REQUESTED	Marbles,10.0
10					

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2	2024-05-04	23:39:44	1	ORDER REQUESTED	Dolphin,22.0
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6	2024-05-04	23:39:50	1	ORDER REQUESTED	Elephant,20.0
7	2024-05-04	23:39:51	1	ORDER REQUESTED	Whale,9.0
8	2024-05-04	23:39:53	1	ORDER REQUESTED	Dolphin,11.0
9	2024-05-04	23:39:54	1	ORDER REQUESTED	Marbles,10.0
10					

Output files for all replicas

```
src > Order > 📄 order1.csv
```

1	Order Number	Toy Name	Quantity
2	1	Dolphin	22.0
3	2	Lego	19.0
4	3	Tux	39.0
5	4	Elephant	20.0
6	5	Whale	9.0
7	6	Dolphin	11.0
8	7	Marbles	10.0
9			

```
src > Order > 📄 order2.csv
```

1	Order Number	Toy Name	Quantity
2	1	Dolphin	22.0
3	2	Lego	19.0
4	3	Tux	39.0
5	4	Elephant	20.0
6	5	Whale	9.0
7	6	Dolphin	11.0
8	7	Marbles	10.0
9			

```
src > Order > 📄 order3.csv
```

1	Order Number	Toy Name	Quantity
2	1	Dolphin	22.0
3	2	Lego	19.0
4	3	Tux	39.0
5	4	Elephant	20.0
6	5	Whale	9.0
7	6	Dolphin	11.0
8	7	Marbles	10.0
9			