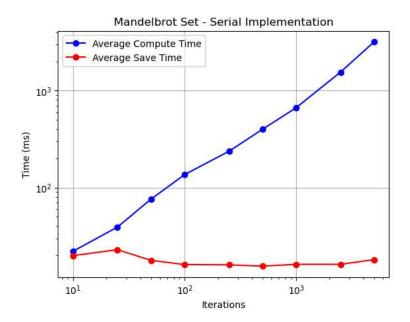
## **Serial Implementation**

The serial algorithm was run with the following values for the number of iterations:

```
iteration_values = [10, 25, 50, 100, 250, 500, 1000, 2500, 5000]
```

## **Performance Metrics**

Each was run for a total of 10 times. The graph uses the average time taken per iteration. Scale is logarithmic for both axes.



Data (12500H) - also used for the above plot:

| Iterations | Compute Time (ms) | Save Time (ms) |
|------------|-------------------|----------------|
| 10         | 22.10             | 24.30          |
| 25         | 52.70             | 21.20          |
| 50         | 86.30             | 18.20          |
| 100        | 130.10            | 17.10          |
| 250        | 236.40            | 16.20          |
| 500        | 398.70            | 15.60          |
| 1000       | 699.80            | 24.20          |
| 2500       | 1560.40           | 18.60          |
| 5000       | 3102.10           | 18.10          |

Data (5700x3D):

| Iterations | Compute Time (ms) | Save Time (ms) |
|------------|-------------------|----------------|
| 10         | 32.30             | 24.90          |

| 25   | 53.70   | 21.20 |
|------|---------|-------|
| 50   | 79.20   | 21.40 |
| 100  | 128.30  | 21.40 |
| 250  | 268.60  | 21.80 |
| 500  | 496.60  | 22.00 |
| 1000 | 953.50  | 21.90 |
| 2500 | 2321.90 | 22.30 |
| 5000 | 4583.10 | 22.90 |