**Project 3 Report**

1. **Team members**

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1. **Compile**

dotnet run

numNodes numRequests

For example: 100 10

1. **Output & Results**

|  |  |  |
| --- | --- | --- |
| num of nodes | num of requests | average hops |
| 10 | 10 | 3.22 |
| 100 | 10 | 5.288 |
| 1000 | 10 | 6.9718 |
| 10000 | 10 | 7.26542 |

In the figure above, the number of nodes increase from 10 to 10000. The number of requests is 10. The average of hops increases from 3.22 to 7.27. The logarithmic verision shows in this figure.

|  |  |  |
| --- | --- | --- |
| num of nodes | num of requests | average hops |
| 10 | 5 | 2.74 |
| 100 | 5 | 4.936 |
| 1000 | 5 | 7.198 |
| 10000 | 5 | 7.27818 |

|  |  |  |
| --- | --- | --- |
| num of nodes | num of requests | average hops |
| 100 | 50 | 4.8906 |
| 125 | 40 | 6.4138 |
| 200 | 25 | 6.373 |
| 500 | 10 | 7.198 |

1. **The largest problem we managed to solve**

**The largest problem we managed to solve is when number of nodes is 1000, number of requests is 10, the average hop is 7.26542**