

# Lab Report

## Members

- Cameron Shearer: 50%
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## Compilation

Program is a visual studio solution.

## Checks for 3 Structures

Operation	Hash Table 1D	Hash Table 2D	Binary Search Tree
Insert 1	56	64	214
Remove	10	11	34
Insert 2	57	76	305
Find	81	97	330

## Analysis

The findings show that in this case the best data structure to use is a one dimensional hash table rather than a two dimensional hash table or a binary search tree. This fits with expected behavior because the data is random which leads to higher benefits from hashing to find an index. What would make a binary search tree more ideal would be a case where you have data that is ordered in some way rather than just random. A two dimensional hash table would be more ideal if the data ended up hashing to similar values where as the one dimensional hash table fits this situation well.