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CS-300

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**Step 4:**

Vector:

Reading the file and creating the vector - O(N)

Verifying prerequisites - O(N^2)

Finding a specific item - O(N)

Print every item in order - O(n log n) (for quicksort) + O(N)

Hash table:

Reading the file and creating the hash table- O(N)

Verifying prerequisites - O(N)

Finding a specific item - O(1)

Print every item in order - O(N^2) + O(n log n)

Binary search:

Reading the file and creating the tree - O(N)

Verifying prerequisites - O(N) + O(log n)

Finding a specific item - O(log n)

Print every item in order - O(N)