

Input: words.txt

Hashing Strategy:

- a. Linear Probing
- b. Quadratic Probing
- c. Double Hashing
- d. Separate Chaining

Table size:

- a. Prime number
- b. Non-Prime number

Load factor:

- a. 0.5
- b. 0.7

Apply the hash function to each word, and store a count of the number of times each position is hashed to. You will get a distribution: Some percentage of the positions will not be hashed to, some will be hashed to once, some twice, and so on. Plot the graph for each hashing strategy.

Apply the hash function to each word, and store a count of the number of probes. Plot the graph for each hashing strategy.

Time taken for search operation. Plot the graph.

| Hashing Strategy | Time | Probes Used |
|-------------------|------|-------------|
| Linear Probing | | |
| Quadratic Probing | | |
| Double Hashing | | |
| Separate Chaining | | |

Time taken for various search operations. Plot the graph.

| Hashing Strategy | No. of Searches | Time | | | Probes Used |
|------------------|-----------------|------|-----|-----|-------------|
| | | Min | Avg | Max | |
| Linear Probing | 10 | | | | |
| | 20 | | | | |
| | 30 | | | | |
| | 40 | | | | |
| | 50 | | | | |

| | | | | | |
|-------------------|----|--|--|--|--|
| Quadratic Probing | 10 | | | | |
| Double Hashing | 10 | | | | |
| Separate Chaining | 10 | | | | |