

Question 7: Double Hashing

Time - $O(n)$ where n is the number of elements in the array because we iterate through the array to add them to the hash table.

Space - $O(n)$ where n is the number of elements because the hash table holds n elements into it.

Radix Sort:

Time - $O(k \cdot n)$ where k is the max. number of digits, or characters in the string and

Space - $O(n)$ where n is the number of elements. n is the number of strings, in the array because we create an array that holds n numbers in it.

Word Pattern:

Time - $O(n)$ where n is the number of chars in the string because we iterate through each

Space - $O(n)$ where n is the # of words found in the string because char in the string. We store them in hashmap, hashset that holds n words