

## 7- Routing

1. Search for given path using standard Trie search algorithm.
2. If path is not present, return None.
3. If path is present and is end of word in Trie, print handler\_path.
4. If last matching node of path has no children, return None.
5. Else recursively print all nodes under subtree of last matching node.

## Time complexity

### O(n) :

Worst case runtime of creating a trie is  $O(mn)$  where  $m$  is the longest path and  $n$  is the total number of paths. The time complexity of **searching**, inserting, and deleting from a trie depends on the length of the path and the total number of the paths  $O(am)$ .

## Space Complexity

**We don't need extra space so it is  $O(1)$**