

Problem 7: Request Routing in a Web Server with a Trie

To solve this problem I did a Trie implementation and the solution got divided into **insert** and **lookup** parts.

Time Space Complexity

insert path

Time $\rightarrow O(n)$, because we loop through a list of segments from a url path that has been splitted.

Space $\rightarrow O(n)$, because we store a segment in each node, depending on the number of segments once the url path has been split.

lookup path

Time $\rightarrow O(n)$, because we loop through a list of segments from a url path that has been split.

Space $\rightarrow O(1)$, because we just return the path's handler