Task 1.

* I think for the data structure use Trie data structure because the name patient will be store in the set of strings and while looking for the particular name of patient the program can search a word in the dictionary with the help of the word prefix. And for the searching algorithm I think using Binary Search because the data structure already sorted so every iteration will be divide into 2 array then see which element to be search and recursively do the same thing until the element is found
* In my opinion if using Trie Data Stucture and Binary Search algorithm is quite fast, probably it takes under a second. But the searching duration also depend on the hardware