

Recursion

- "it's defined in terms of itself"
- run ion $O(2^n)$
- function calls require creating a stack frame
- only use recursion when it feels natural
- search an ordered array is $O(\log(n))$
 - ↳ slicing it into 3 parts
 - $O(\log(n))$
 - ↳ requires the memory to be stored
- new node allocates a node
 - ↳ children = null
 - makes room for the string
 - copies the string
- str. end () = looks for a string
- recursion is used by diving the space
 - ↳ natural to search
 - ↳ sometimes recursion is not as efficient