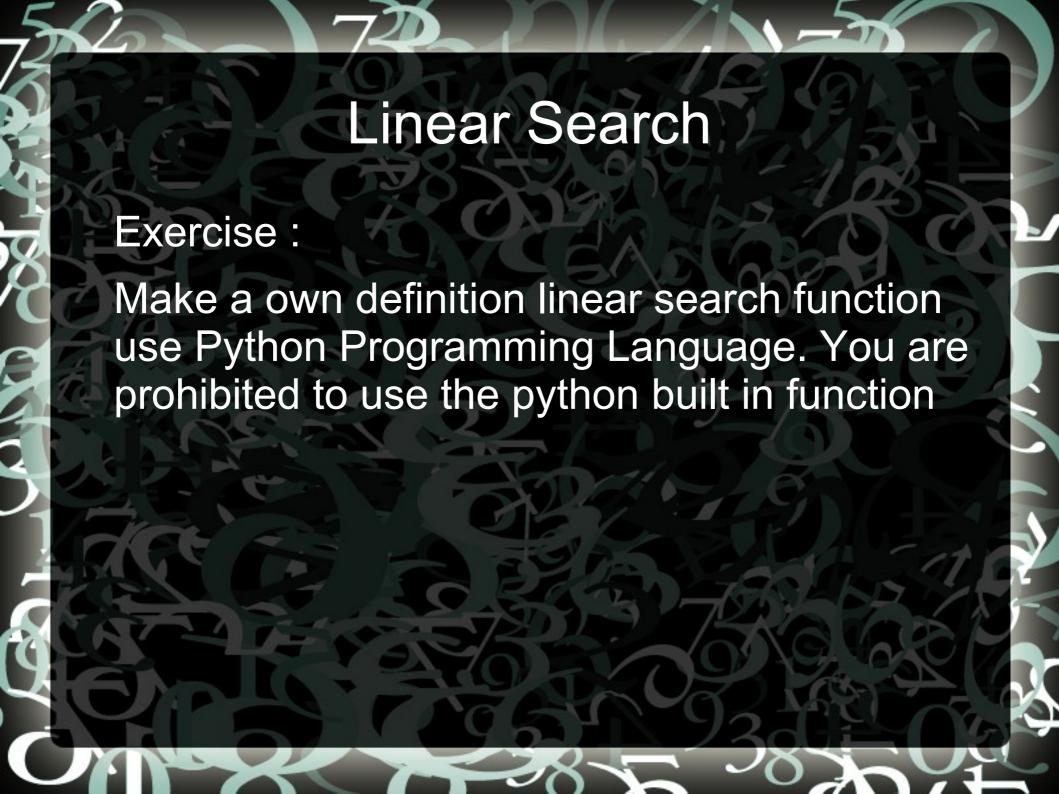


Linear Search

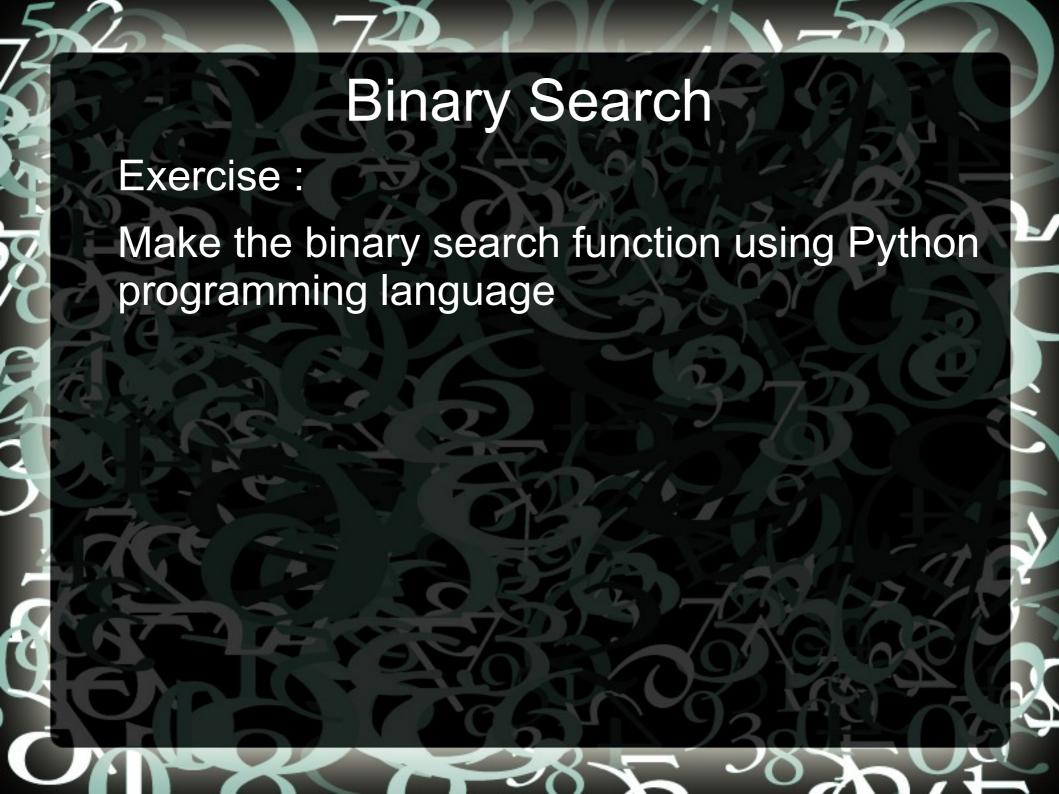
Linear method searches for a particular item (called the target item) within a list of arbitrarily arranged items. In such a list, the only way to search for a target item is to begin with the item at the first position and compare it to the target. If the items are equal, the method returns True. Otherwise, the method moves on to the next position and compares items again. If the method arrives at the last position and still cannot find the target, it returns False.



Binary Search

- The method is used to search an item in sorted data
- How does the binary search method work
 - The search algorithm goes directly to the middle position in the list and compares the item at that position to the target.
 - If there is a match, the algorithm returns the position.
 - Otherwise, if the target is less than the current item, the algorithm searches the portion of the list before the middle position.

Binary Search How does the binary search method work if the target is greater than the current item, the algorithm searches the portion of the list after the middle position. The search process stops when the target is found or the current beginning position is greater than the current ending position.



Selection Sort

