Linear and Binary Search (Optional)

If you're curious about how linear and binary search look in code, here are a couple of implementations in Python:

```
def linear_search(list, key):
    """If key is in the list returns its position in the list,
       otherwise returns -1."""
    for i, item in enumerate(list):
        if item == key:
            return i
    return -1

```

```
def binary_search(list, key):
    """Returns the position of key in the list if found, -1 otherwise.

    List must be sorted.
    """
    left = 0
    right = len(list) - 1
    while left <= right:
        middle = (left + right) // 2

        if list[middle] == key:
            return middle
        if list[middle] > key:
            right = middle - 1
        if list[middle] < key:
            left = middle + 1
    return -1

```

Don't worry if this seems complex! Understanding this code isn't required for understanding how to use binary search in troubleshooting.

Mark as completed