**Analysis**

**Time Complexity Comparison**

* **Linear Search:**
  + Best Case: O(1)
  + Average Case: O(n)
  + Worst Case: O(n)
* **Binary Search:**
  + Best Case: O(1)
  + Average Case: O(log n)
  + Worst Case: O(log n)

**Suitability for the Platform**

* **Linear Search:** Suitable for small datasets or unsorted datasets. It's simple to implement but not efficient for large datasets.
* **Binary Search:** Suitable for large, sorted datasets. It is much faster than linear search for large datasets due to its logarithmic time complexity.