**Exercise 6: Library Management System**  
**Understand Search Algorithms**   
 **Linear Search:**  
 Checks element one by one.  
 Sorting is not required   
 ideal when elements is small and unsorted  
 **Binary Search:**  
 Divides into half and searches.  
 The array must be sorted.  
 Ideal when elements is Large and sorted.  
  
 **Time Complexity Comparison:**  
 Linear Search - O(n)  
 Binary Search - O(log n)  
  
**When to use which ?**   
 Searching in few books - Linear  
 Searching In a sorted collection - Binary  
 Searching in unsorted collection - Linear