Practical 05

Aim :- Write a python program to perform Binary search using strings. Code :-

# Python program for binary search using strings

# List of strings (must be sorted for binary search to work)

arr = ["apple", "banana", "cherry", "date", "grape", "mango", "orange", "peach"]

# Input string to search for

target = input("Enter the string to search: ").lower()

# Binary Search low = 0

high = len(arr) - 1 found = False

while low <= high:

mid = (low + high) // 2 # Find the middle index if arr[mid] == target:

print(f"'{target}' found at index {mid}") found = True

break

elif arr[mid] < target:

low = mid + 1 # Search the right half else:

high = mid - 1 # Search the left half

if not found:

print(f"'{target}' not found in the list.")

