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In [1]: #LINEAR SEARCH ALGORITHM
arr=[4,2,7,1,9,3,5]
target=9
found=False
for i in range(len(arr)):
    if arr[i]==target:
        print(f"Element {target} found at index {i}")
        found=True
        break
    else:
        print(f"Element {target} is not in array")
```

Element 9 found at index 4

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In [2]: #WITH USER INPUT
lst=[]
n=int(input("Enter number of elements:"))
for j in range(0,n):
    element=int(input())
    lst.append(element)
print("List:",lst)
target=int(input("Enter the target:"))
found=False

for i in range(len(lst)):
    if lst[i]==target:
        print(f"Element {target} found at index {i}")
        found=True
        break
    else:
        print(f"Element {target} is not in array")
```

Enter number of elements:5

1

4

6

8

43

List: [1, 4, 6, 8, 43]

Enter the target:3

Element 3 is not in array

```
In [3]: #BINARY SEARCH ALGORITHM
arr=[1,3,5,7,9,11,13,15,17,19]
low=0
high=len(arr)-1
target=2
found=False

while(low<=high):
    mid=(low+high)//2
    if arr[mid]==target:
        print(f"Element {target} is found at index {mid}")
        break
    elif arr[mid]<target:
        low=mid+1
    else:
        high=mid-1
else:
    print(f"Element {target} is not in array")
```

Element 2 is not in array