Roll No: 04

Name: Badhe Rohan Vikas

Assignment No: 10

Assignment Name : Write a python program for use of Binary search algorithm to search an element.(Without using recursion)

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def binary\_search(arr, low, high, ele):

    mid = 0

    while low <= high:

        mid = (high + low) // 2

        if arr[mid] < ele:

            low = mid + 1

        elif arr[mid] > ele:

            high = mid - 1

        else:

            return mid+1

    return -1

arr = [2, 3, 4, 10, 40]

Element = 4

low = 0

high = len(arr) - 1

result = binary\_search(arr,low, high,  Element)

if result != -1:

    print("Element is present at Posistion", str(result))

else:

    print("Element is not present in array")

**Output :**

Element is present at Position 3