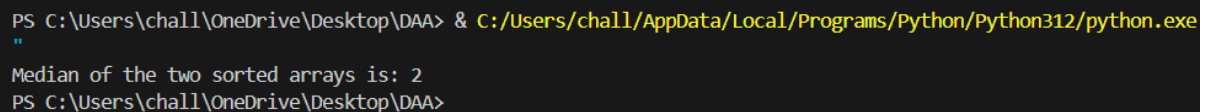## 30. Given two sorted arrays nums1 and nums2 of size m and n respectively, return the median of the two sorted arrays. The overall run time complexity should be O(log (m+n)).

**PROGRAM:**

```
def findMedianSortedArrays(nums1, nums2):
    merged = sorted(nums1 + nums2)
    total_len = len(merged)
    if total_len % 2 == 0:
        return (merged[total_len // 2 - 1] + merged[total_len // 2]) / 2
    else:
        return merged[total_len // 2]
nums1 = [1, 3]
nums2 = [2]
median = findMedianSortedArrays(nums1, nums2)
print("Median of the two sorted arrays is:", median)
```

**OUTPUT:**

```
PS C:\Users\chall\OneDrive\Desktop\DAA> & C:/Users/chall/AppData/Local/Programs/Python/Python312/python.exe
"
Median of the two sorted arrays is: 2
PS C:\Users\chall\OneDrive\Desktop\DAA>
```

**TIME COMPLEXITY:**

Time complexity for the above code is O(log(m+n))