

## 6. Python program to implement binary search

```
def binarySearch(numbers, low, high, x):  
    if (high >= low):  
        mid = low + (high - low)//2  
        if (numbers[mid] == x):  
            return mid  
        elif (numbers[mid] > x):  
            return binarySearch(numbers, low, mid-1, x)  
        else:  
            return binarySearch(numbers, mid+1, high, x)  
    else:  
        return -1  
  
numbers = [ 1,4,6,7,12,17,25 ]  
x = 7  
result = binarySearch(numbers, 0, len(numbers)-1, x)  
if (result != -1):  
    print("Search successful, element found at position ", result)  
else:  
    print("The given element is not present in the array")
```

### output:

Search successful, element found at position 3