

130 . Write a program FOR THE BELOW TEST CASES with least time complexity


Test Cases: -

1) Input: {1, 2, 3, 4, 5} Expected Output: 5

AIM: To find the maximum element

PROGRAM:

```
def find_maximum(nums):  
    if not nums:  
        return None  
  
    max_element = float('-inf')  
  
    for num in nums:  
        if num > max_element:  
            max_element = num  
  
    return max_element  
  
nums = [1, 2, 3, 4, 5]  
print(find_maximum(nums))
```

OUTPUT: 

TIME COMPLEXITY:  $O(n)$