```python
def find_max(nums: list[int], length) -> int:
    if length == 1:
        return nums[0]
    return max(nums[length - 1], find_max(nums, length - 1))



if __name__ == "__main__":
    num_list = [1, 4, 7, 1, 2, 4, 9, 1293, 123, 124359, 12243, 12,
-1234893, 124534, 1, 3, 1, 5]
    length = len(num_list)
    print(find_max(num_list, length))
```

Recursion is not a very good way to solve this problem as the recursion depth for a large list of numbers exceeds the limit for python and calling the function for every element in the list recursively makes runtime slower which can be verified by using time().