

```
int lengthOfLIS(vector<int>& nums) {  
    int count = 1;  
    vector<int> Ms(nums.size(), {1});  
  
    for (int i = 1; i < nums.size(); i++){  
        for (int j = i - 1; j >= 0; j--){  
            if (nums[i] > nums[j]){  
                Ms[i] = max(Ms[i], Ms[j] + 1);  
                if (Ms[i] > count)  
                    count = Ms[i];  
            }  
        }  
    }  
    return count;  
}
```