LIS

```
def lis(seq):
  n = len(seq)
  DP = [1] * n
  prev = [-1] * n
  ans = 0
  for i in range(n):
    for j in range(i):
       if seq[j] < seq[i] and DP[i] < DP[j] + 1:
         DP[i] = DP[j] + 1
         prev[i] = j
    if DP[ans] < DP[i]:
       ans = i
  return max(DP)
N = int(input())
A = list(map(int, input().split()))
print(lis(A))
 Sphere online judge
                                    judge status
                              < Previous 1 2 3 4 5 Next >
                                      PROBLEM
                                                                            TIME MEM LANG
 33621107 2024-10
                               Easy Longest Increasing Subsequence
```