# [2,5,3,200,7,101]

```
dp = [n]

for(i=0 ; i<n; i++){
  int BestofPrev = 0

  for(j=i-1; j>=0; j--){
    if(arr[i] > arr[j]){
      BestofPrev = Max (BestofPrev, dp[j]);
    }
  }
  dp[i] = BestofPrev + 1 ;
}

for(i->0 -> n)
        max i -> dp[i]
```

arr =

| | | | | | |
|---|---|---|---|---|---|
| 2 | 5 | 3 | 200 | 7 | 101 |

1

bestofPrev = 3

DP =

| | | | | | |
|---|---|---|---|---|---|
| {2} | {2,5} | {2,3} | {2,3,200} | {2,3,7} | {2,3,7,101} |
| 1 | 2 | 2 | 3 | 3 | 4 |
| 0 | 1 | 2 | 3 | 4 | 5 |

1