Nearest Smaller Element

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Given an array, find the **nearest** smaller element G[i] for every element A[i] in the array such that the element has an **index smaller than i**.

More formally,

```
G[i] for an element A[i] = an element A[j] such that
j is maximum possible AND
j < i AND
A[j] < A[i]
```

Elements for which no smaller element exist, consider next smaller element as -1.

Input Format

```
The only argument given is integer array A.
```

Output Format

```
Return the integar array G such that G[i] contains nearest smaller number than A[i].If r
```

For Example

```
Input 1:
    A = [4, 5, 2, 10, 8]
Output 1:
    G = [-1, 4, -1, 2, 2]
Explaination 1:
    index 1: No element less than 4 in left of 4, G[1] = -1
    index 2: A[1] is only element less than A[2], G[2] = A[1]
    index 3: No element less than 2 in left of 2, G[3] = -1
    index 4: A[3] is nearest element which is less than A[4], G[4] = A[3]
    index 4: A[3] is nearest element which is less than A[5], G[5] = A[3]

Input 2:
    A = [3, 2, 1]
Output 2:
    [-1, -1, -1]
Explaination 2:
    index 1: No element less than 3 in left of 3, G[1] = -1
    index 2: No element less than 2 in left of 2, G[2] = -1
    index 3: No element less than 1 in left of 1, G[3] = -1
```

See Expected Output