144. Write code to modify bubble_sort function to stop early if the list becomes sorted before all passes are completed.

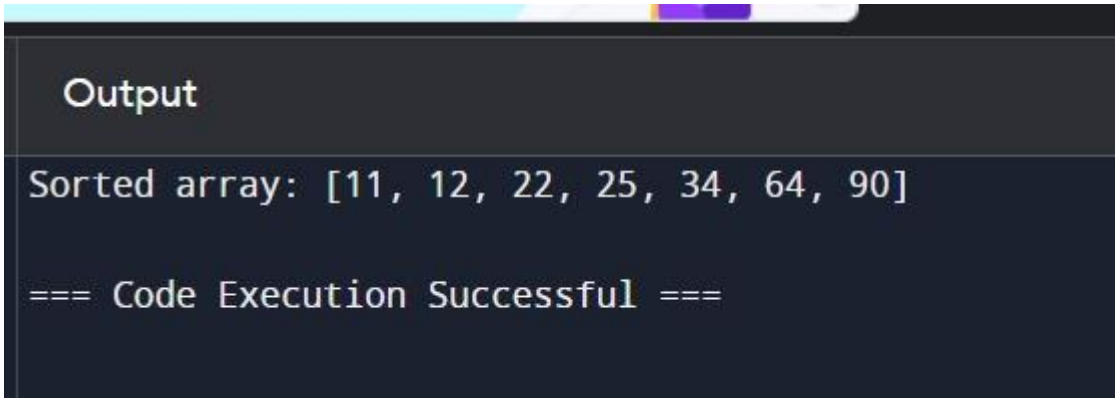
Program:-

```
def bubble_sort_modified(arr):
    n = len(arr)
    for i in range(n):
        swapped = False
        for j in range(0, n-i-1):
            if arr[j] > arr[j+1]:
                arr[j], arr[j+1] = arr[j+1], arr[j]
                swapped = True
        if not swapped:
            break
    return arr
```

input:-

```
arr = [64, 34, 25, 12, 22, 11, 90]
```

output:-



Time complexity:O(n)