Name : Yash Srivastava || Section - A || Roll. No - 63

Implementation and Analysis of Bubble Sort

```
def bubble_sort(a):
    n = len(a)
    for i in range(n - 1):
        for j in range(n - i - 1):
            if a[j] > a[j + 1]:
                a[j], a[j + 1] = a[j + 1], a[j]
    return a


def display(a):
    for i in range(len(a)):
        print(a[i], end=' ')


print("Enter an array")
a = list(map(int, input().split()))
bubble_sort(a)
print("Sorted Array: ")
display(a)
```

Input:

20 30 50 10 40

Output:

10 20 30 40 50

Time Complexity:

- O(n^2)

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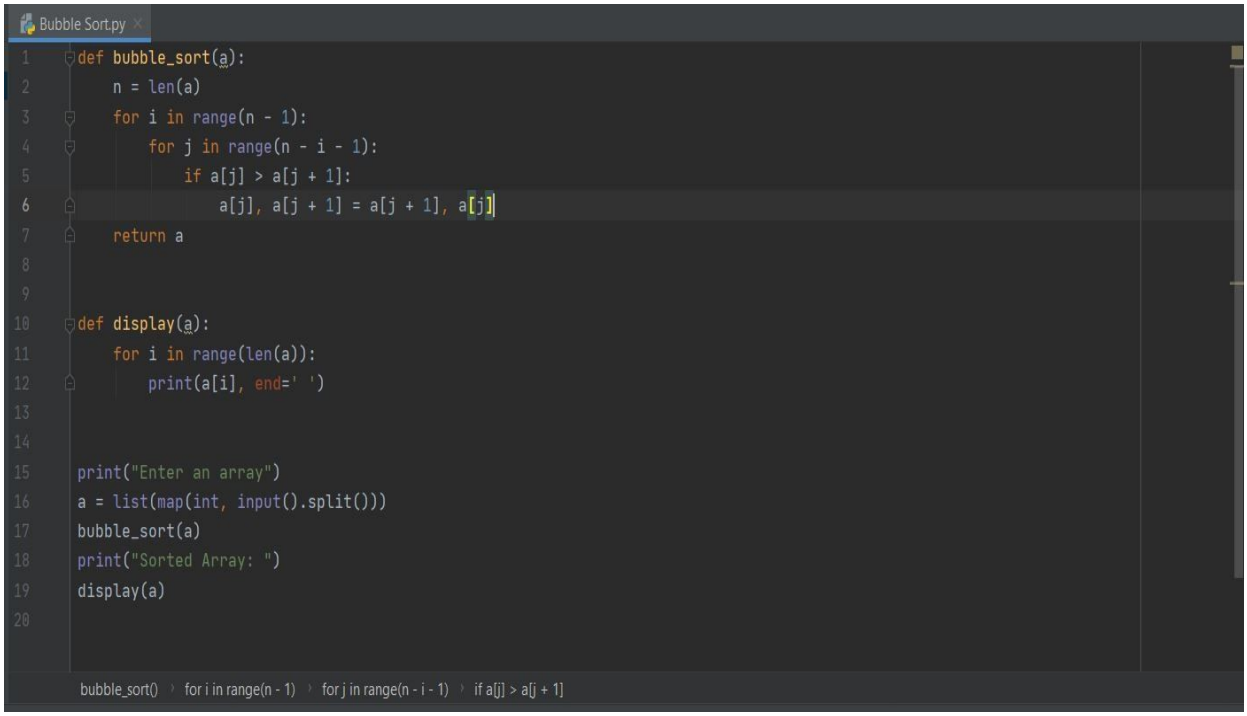
Program:



Input/Output: