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Bubble Sort

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```
In [ ]:
         def getVals(arr):
             print('Current length of array:', len(arr))
             print('Current array:', arr)
             arr += (input("Enter numbers separated by spaces: ").split())
             arr = [int(i) for i in arr if i.isdigit()]
             print('Current length of array:', len(arr))
             print('Current array:', arr)
             if len(arr) < 10:
                 arr = getVals(arr)
             return arr
In [ ]:
         def bubbleSort(arr):
             for i in range(len(arr)):
                 for j in range(0, len(arr) - i - 1):
                      if arr[j] > arr[j + 1]:
                          arr[j], arr[j + 1] = arr[j + 1], arr[j]
                          print(arr)
             return arr
In [ ]:
         bubbleSort(getVals([]))
```

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```
Current length of array: 0
        Current array: []
        Current length of array: 15
        Current array: [1, 2443, 245, 2, 3, 534, 18, 27, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2443, 2, 3, 534, 18, 27, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 2443, 3, 534, 18, 27, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 2443, 534, 18, 27, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 2443, 18, 27, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 2443, 27, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 2443, 36, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 36, 2443, 491, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 36, 491, 2443, 33, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 36, 491, 33, 2443, 72, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 36, 491, 33, 72, 2443, 19, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 36, 491, 33, 72, 19, 2443, 0, 183]
        [1, 245, 2, 3, 534, 18, 27, 36, 491, 33, 72, 19, 0, 2443, 183]
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        [1, 2, 3, 245, 534, 18, 27, 36, 491, 33, 72, 19, 0, 183, 2443]
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        [1, 2, 3, 245, 18, 27, 36, 491, 33, 72, 19, 0, 183, 534, 2443]
        [1, 2, 3, 18, 245, 27, 36, 491, 33, 72, 19, 0, 183, 534, 2443]
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        [1, 2, 3, 18, 27, 36, 245, 491, 33, 72, 19, 0, 183, 534, 2443]
        [1, 2, 3, 18, 27, 36, 245, 33, 491, 72, 19, 0, 183, 534, 2443]
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        [1, 2, 3, 18, 27, 36, 245, 33, 72, 19, 491, 0, 183, 534, 2443]
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        [1, 2, 0, 3, 18, 19, 27, 33, 36, 72, 183, 245, 491, 534, 2443]
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        [0, 1, 2, 3, 18, 19, 27, 33, 36, 72, 183, 245, 491, 534, 2443]
        [0, 1, 2, 3, 18, 19, 27, 33, 36, 72, 183, 245, 491, 534, 2443]
Out[ ]:
In [ ]:
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file:///E:/GitHub/Coursework Sem4/DAA/Export/bubbleSort.html