

Main

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[1]: import numpy as np

[2]: # Declare a 2D array
arr = np.array([
            [3, 2, 1],
            [6, 5, 4],
            [9, 8, 7]])

[3]: # Step 1: Print the declared two dimensional array
print(arr)

[[3 2 1]
 [6 5 4]
 [9 8 7]]

[4]: # Step 2: Sort the two dimensional array
arr = np.sort(arr)
print(arr)

[[1 2 3]
 [4 5 6]
 [7 8 9]]

[5]: # and flatten it after the sorting
print(arr.flatten())

[1 2 3 4 5 6 7 8 9]

[6]: # Step 3: Reshape to 2D with 3 rows
arr = arr.reshape(3, 3)

[7]: # Step 4: After the reshaping print it
print(arr)

[[1 2 3]
 [4 5 6]
 [7 8 9]]
```

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[8]: """  
      Step 5: Add to value of 5 to the first row,  
              multiply 2 to the 2nd row,  
              square the third row.  
      """  
  
      arr[0] += 5  
      arr[1] *= 2  
      arr[2] = np.square(arr[2])
```

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[9]: # 6. Print the updated values of the two dimensional table.  
      print(arr)  
  
      [[ 6  7  8]  
       [ 8 10 12]  
       [49 64 81]]
```

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[10]: # 7.      Get the minimum and maximum values of the two dimensional table.  
       print("Minimum Value: ",np.min(arr))  
       print("Maximum Value: ",np.max(arr))
```

```
Minimum Value:  6  
Maximum Value:  81
```