

Tarea 6

DIVIDE Y VENCERÁS,

MERGE SORT

Diseño y Análisis de Algoritmos
Universidad Nacional Autónoma de México
Facultad de Estudios Superiores Aragón

REALIZADO POR:

**Enrique Emiliano Cano
García**

```
Tarea_6.py ×
1  def merge_sort(arr): 3 usages new *
2      if len(arr) > 1:
3          mid = len(arr) // 2
4          left = arr[:mid]
5          right = arr[mid:]
6          merge_sort(left)
7          merge_sort(right)
8          i = j = k = 0
9          while i < len(left) and j < len(right):
10             if left[i] <= right[j]:
11                 arr[k] = left[i]
12                 i += 1
13             else:
14                 arr[k] = right[j]
15                 j += 1
16             k += 1
17         while i < len(left):
18             arr[k] = left[i]
19             i += 1
20             k += 1
21
22         while j < len(right):
23             arr[k] = right[j]
24             j += 1
25             k += 1
26
27 arreglo = [25, 255, 16, 17, 256, 14, 2, 87, 35, 23]
```

Ejecución

```
C:\Users\milok\PycharmProjects\DAA2026-1\.venv\Scripts\python.exe
[2, 14, 16, 17, 23, 25, 35, 87, 255, 256]
```