

Estrutura de Dados Avançada

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Counting Sort

- Quando se tem um intervalo conhecido e pequeno. Ex: $[0,10]$, $[0,100]$
- Conta as ocorrências de um determinado valor ordenando-os a partir dessas informações
- Apenas números inteiros

Counting Sort

```
CountingSort(V, C)
  for i=0, 100 do
    C[i] = 0
  end
  for i=0,#v do
    C[ v[i] ] = C[ v[i] ]+1
  end
  j = 1
  for i=0,100 do
    while C[i]>0 do
      v[j] = i
      j = j+1
      C[i] = C[i]-1
    end
  end
end
```

Counting Sort

V=

3	5	7	8	1	3
---	---	---	---	---	---

C=

0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

Counting Sort

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i

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0

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2

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i

Bibliografia

Cormen, Thomas H. et al. Algoritmos.; [tradução Arlete Simille]. 3ª ed - Rio de Janeiro - Elsevier, 2011.

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