Exercícios de Ordenação:

1. Dado o vetor

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 37 | 8 | 43 | 29 | 18 | 41 | 51 | 25 |

1. Simule a execução do bubble sort até que o quinto passo (tam=5)

Tamanho original =9

Tam=8

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | tam |
| 11 | 37 | 8 | 43 | 29 | 18 | 41 | 51 | 25 | 8 |
| 11 | 8 | 37 | 29 | 18 | 41 | 43 | 25 | 51 | 7 |
| 8 | 11 | 29 | 18 | 37 | 41 | 25 | 43 | 51 | 6 |
| 8 | 11 | 18 | 29 | 37 | 25 | 41 | 43 | 51 | 5 |
| 8 | 11 | 18 | 29 | 25 | 37 | 41 | 43 | 51 | resp |

1. Simule a execução do selection sort até que o quinto passo.(i=5)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | i | min | j |
| 8 | 37 | 11 | 43 | 29 | 18 | 41 | 51 | 25 | 0 | 2 | 8 |
| 8 | 11 | 37 | 43 | 29 | 18 | 41 | 51 | 25 | 1 | 2 | 8 |
| 8 | 11 | 18 | 43 | 29 | 37 | 41 | 51 | 25 | 2 | 5 | 8 |
| 8 | 11 | 18 | 25 | 29 | 37 | 41 | 51 | 43 | 3 | 4 | 8 |
| 8 | 11 | 18 | 25 | 29 | 37 | 41 | 51 | 43 | 4 | 4 | 8 |
| 8 | 11 | 18 | 25 | 29 | 37 | 41 | 51 | 43 | 5 | 5 | 8 |

1. Simule a execução do insertion sort até que o quarto passo (j=4)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | i | chave | j |
| 11 | 37 | 8 | 43 | 29 | 18 | 41 | 51 | 25 | 0 | 37 | 1 |
| 8 | 11 | 37 | 43 | 29 | 18 | 41 | 51 | 25 | -1 | 8 | 2 |
| 8 | 11 | 37 | 43 | 29 | 18 | 41 | 51 | 25 | 2 | 43 | 3 |
| 8 | 11 | 29 | 37 | 43 | 18 | 41 | 51 | 25 | 1 | 29 | 4 |

1. Simule a execução do quick sort até a primeira chamada recursiva.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | **i** | **j** | **m** |
| 11 | 37 | 8 | 43 | 29 | 18 | 41 | 51 | 25 | 0 | 8 | 29 |
| 11 | 37 | 8 | 43 | 29 | 18 | 41 | 51 | 25 | 1 | 8 | 29 |
| 11 | 25 | 8 | 43 | 29 | 18 | 41 | 51 | 37 | 2 | 7 | 29 |
| 11 | 25 | 8 | 18 | 29 | 43 | 41 | 51 | 37 | 3 | 5 | 29 |
| 11 | 25 | 8 | 18 | 29 | 43 | 41 | 51 | 37 | 4 | 4 | 29 |
| 11 | 25 | 8 | 18 | 29 | 43 | 41 | 51 | 37 | 5 | 3 | 29 |