

## Atividade 1 - Busca, Ordenação e Árvores

Alunos: Antonni Guedes Alves de Moraes e Gedson Menezes Souza

1. a) Lista: 33, 40, 56, 58, 59, 72, 77, 92, 96, 99  
Chave: 92
- b) Lista: 9, 22, 37, 39, 52, 58, 61, 63, 66, 69, 76, 82, 88, 89  
Chave: 9
- c) Lista: 1, 2, 16, 17, 19, 20, 35, 42, 53, 57, 58, 59, 64, 67, 75, 82, 93, 94, 96, 99  
Chave: 83

### IMPLEMENTAÇÕES NO ARQUIVO .c

2. a) Ordem decrescente.
  - b) O elemento é o primeiro da lista.
  - c) O elemento é menor que o último item da lista.
3. <https://resulta.do/20cbf4a448fa>  
Lista inicial: 13, 86, 37, 61, 82, 63, 77, 53

Bubble sort:

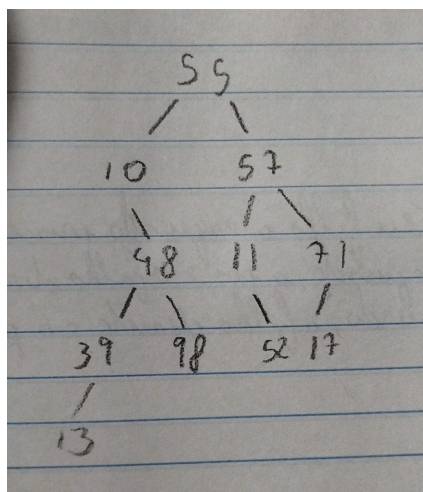
**13, 86**, 37, 61, 82, 63, 77, 53  
13, **86, 37**, 61, 82, 63, 77, 53  
13, 37, **86, 61**, 82, 63, 77, 53  
13, 37, 61, **86, 82**, 63, 77, 53  
13, 37, 61, 82, **86, 63**, 77, 53  
13, 37, 61, 82, 63, **86, 77**, 53  
13, 37, 61, 82, 63, 77, **86, 53**  
13, 37, 61, 82, 63, 77, 53, 86  
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**13, 37**, 61, 63, 77, 53, 82, 86  
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**13, 37**, 61, 63, 53, 77, 82, 86  
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**13, 37**, 61, 53, 63, 77, 82, 86  
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**13, 37**, 53, 61, 63, 77, 82, 86  
 13, **37, 53**, 61, 63, 77, 82, 86  
**13, 37**, 53, 61, 63, 77, 82, 86

Selection Sort:

**13**, 86, 37, 61, 82, 63, 77, 53  
 13, **86, 37**, 61, 82, 63, 77, 53  
 13, 37, **86**, 61, 82, 63, 77, **53**  
 13, 37, 53, **61**, 82, 63, 77, 86  
 13, 37, 53, 61, **82, 63**, 77, 86  
 13, 37, 53, 61, 63, **82, 77**, 86  
 13, 37, 53, 61, 63, 77, **82**, 86

4.



Pré-ordem: 55, 10, 48, 39, 13, 98, 57, 11, 52, 71, 17

In-ordem: 10, 13, 39, 48, 98, 55, 11, 52, 57, 17, 71

Pós-ordem: 13, 39, 98, 48, 10, 52, 11, 17, 71, 57, 55