

2ª Avaliação Parcial (2ª Chamada)  
Curso: Engenharia de Computação  
Disciplina: Estruturas de Dados  
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Universidade Federal do Ceará – UFC/Sobral

Nome: \_\_\_\_\_

Data \_\_\_\_/\_\_\_\_/2018

Obs: as inserções e remoções devem obrigatoriamente ocorrer na ordem apresentada.

Questão 1:

- a) Insira a seguinte sequência de chaves em uma árvore binária de busca: 35, 41, 23, 36, 27, 30, 12, 15, 3, 50, 60, 28. (1,2 ponto);
- b) Remova os elementos 35, 30, 23, 28. (1,2 ponto).

Questão 2:

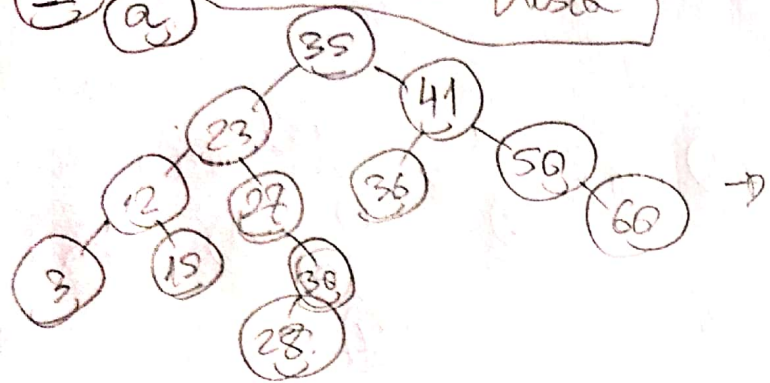
- a) Insira a seguinte sequência de chaves em uma árvore AVL: 9, 22, 13, 55, 44, 12, 56, 11, 17, 41. (1,8 ponto);
- b) Remova os elementos 13, 11, 44, 56. (1,8 ponto).

Questão 3:

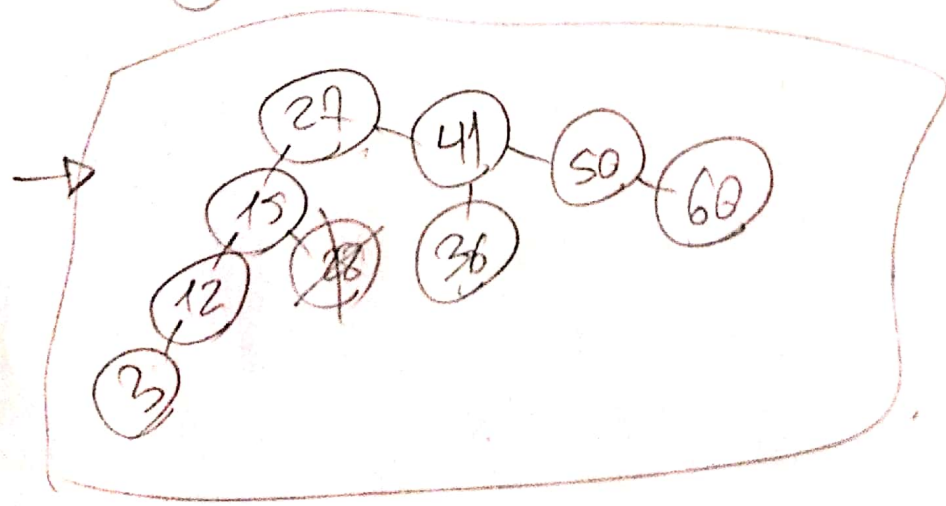
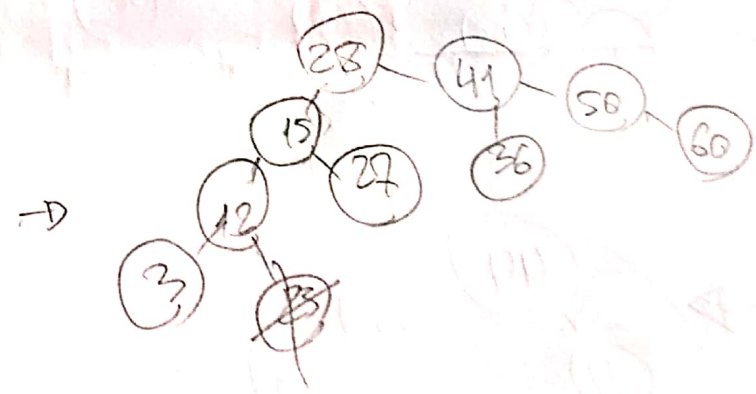
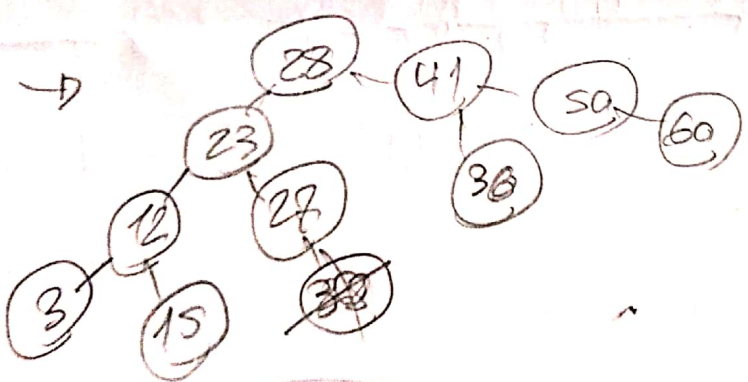
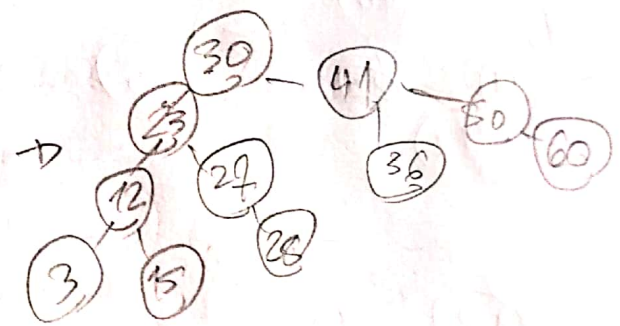
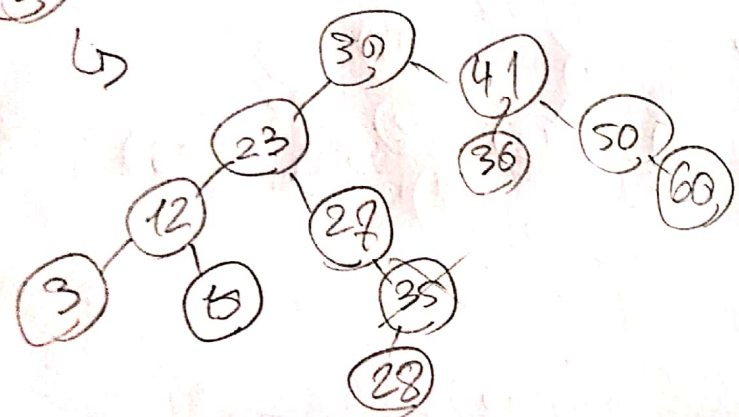
- a) Construa uma árvore rubro-negra para a seguinte sequência de chaves: 54, 45, 11, 1, 5, 22, 49, 56, 30. (2,0 pontos);
- b) Remova os elementos 45, 1, 5, 30. (2,0 pontos).

2ª Chamada AP2  
Estrutura 2018.1

1 a) Árvore Binária de Busca

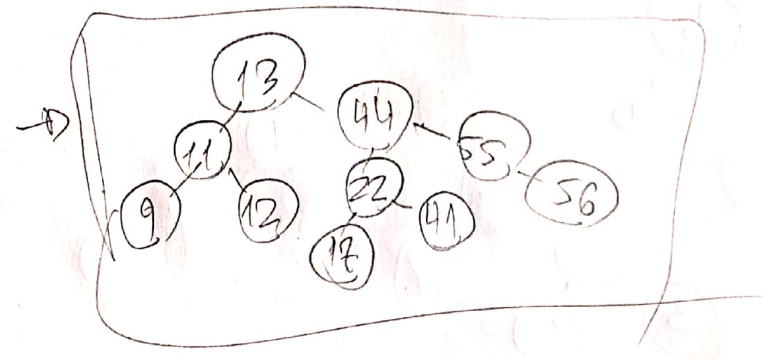
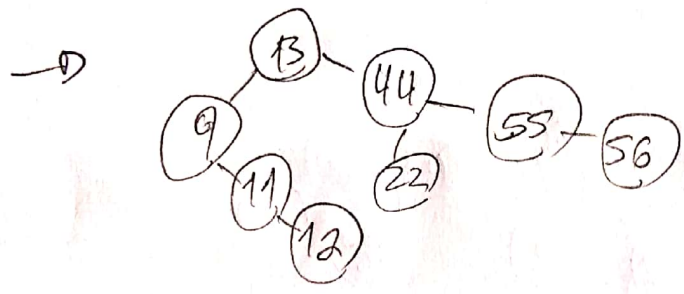
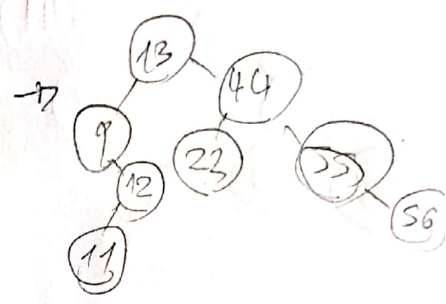
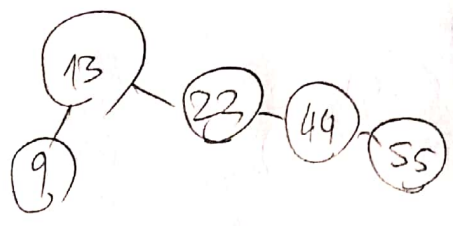
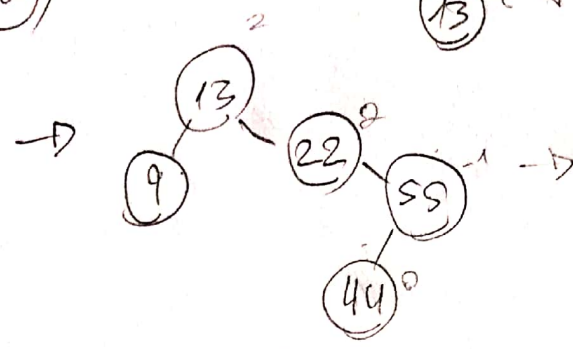
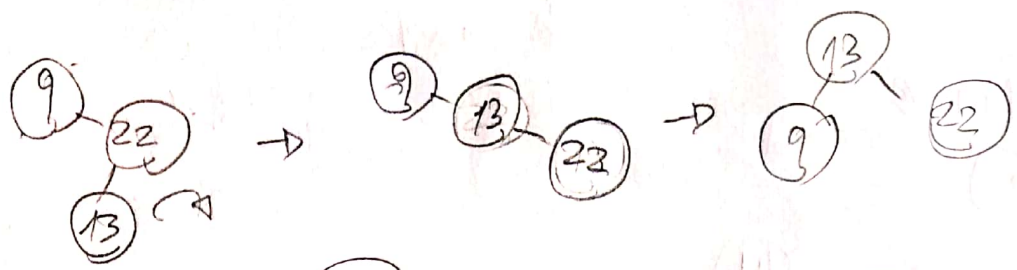


b)

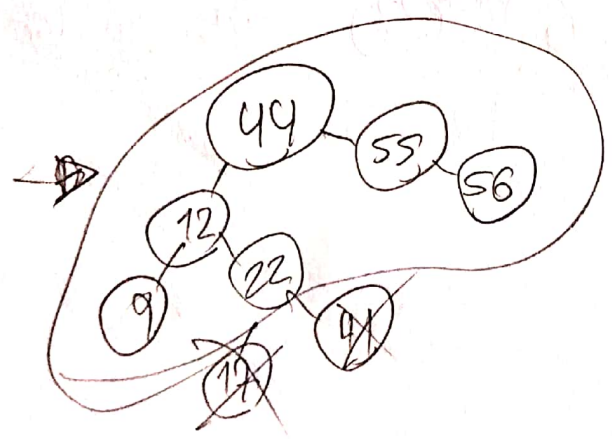
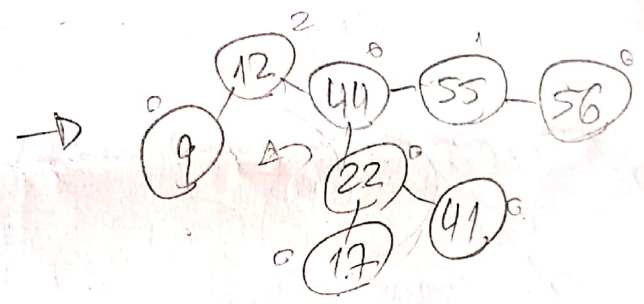
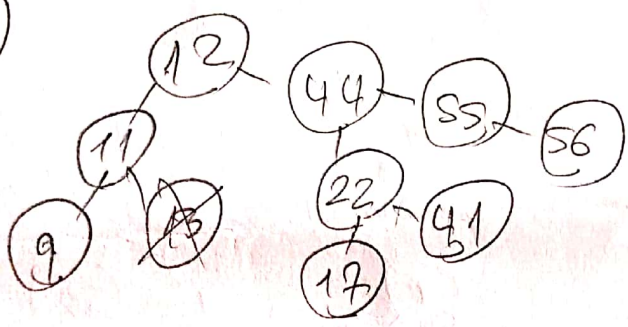


2) AVL

a)



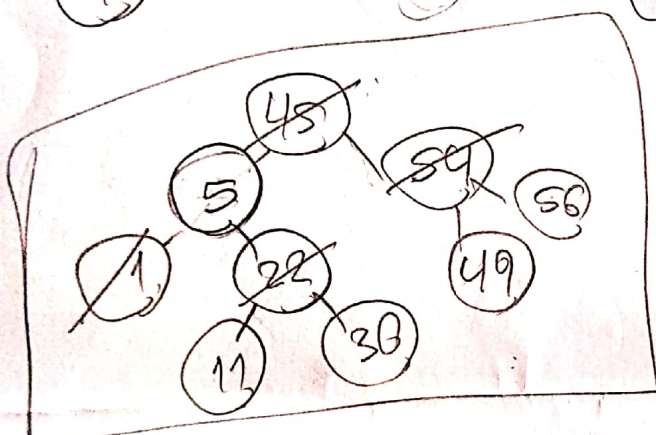
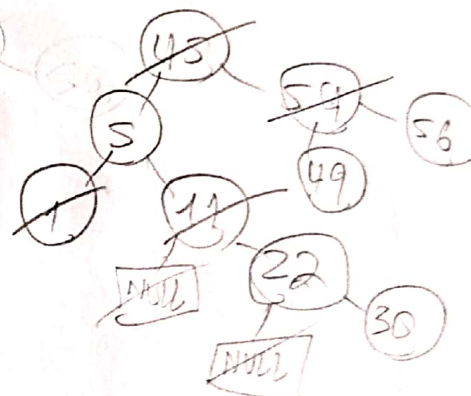
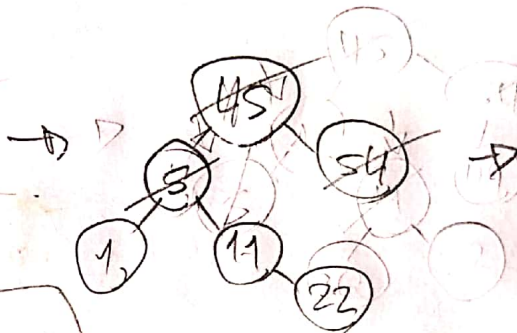
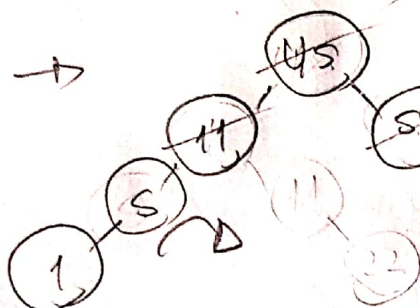
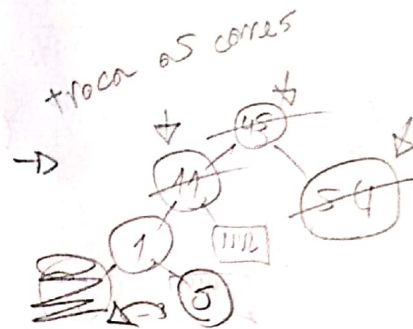
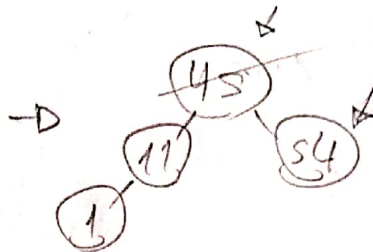
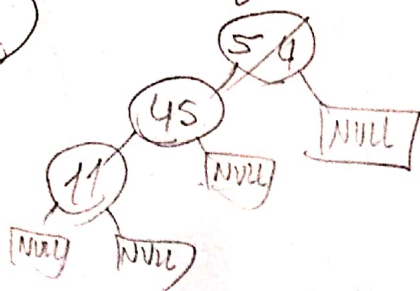
b)



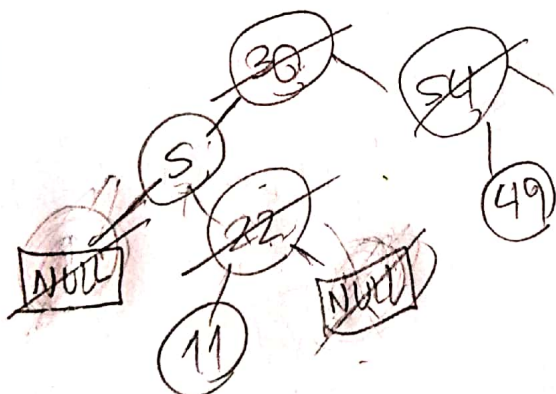


3 Rubro negro

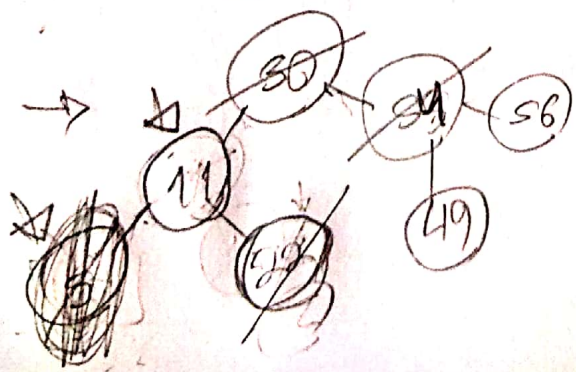
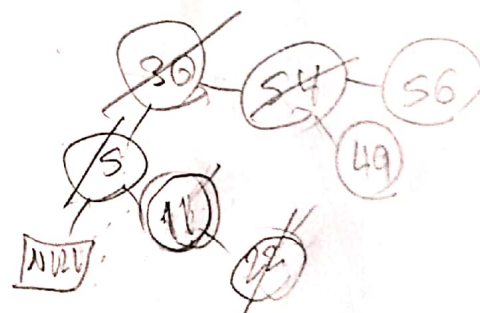
a



b



56



Troca os cores

