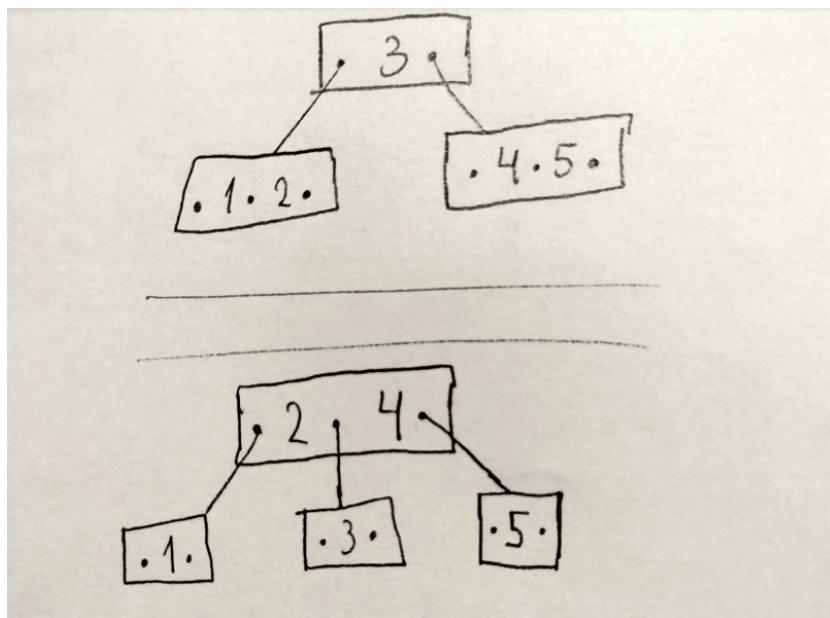


Miniteste 4 - Árvore B

1) Sabendo que a ordem d de uma árvore B deve ser no mínimo 1, já que o número mínimo de chaves é determinado pela ordem da árvore, e que o número mínimo de filhos de uma página é $d + 1$ filhos, é impossível ter apenas 1 filho em uma árvore B.

2) $M = 8, Q = 10, T = 14, X = 21, R = 11, S = 12$.

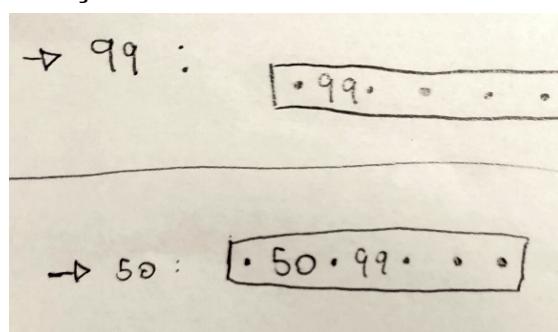
3)



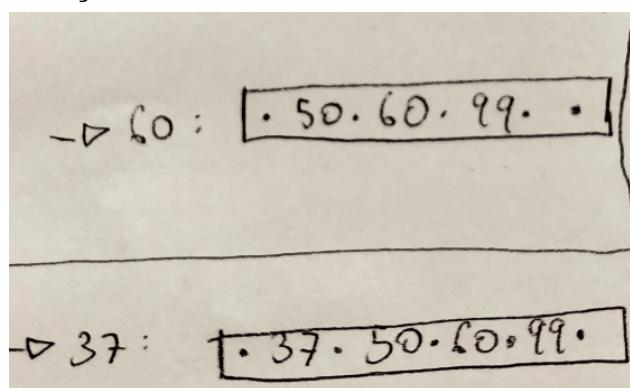
4) O nó raiz da árvore é carregado, e em seguida a busca vai para o maior nó filho da direita. Assim, apenas os nós filhos com os maiores valores são carregados até chegar no nó folha com as maiores chaves, e consequentemente, o valor mais à direita do nó será a maior chave.

5)

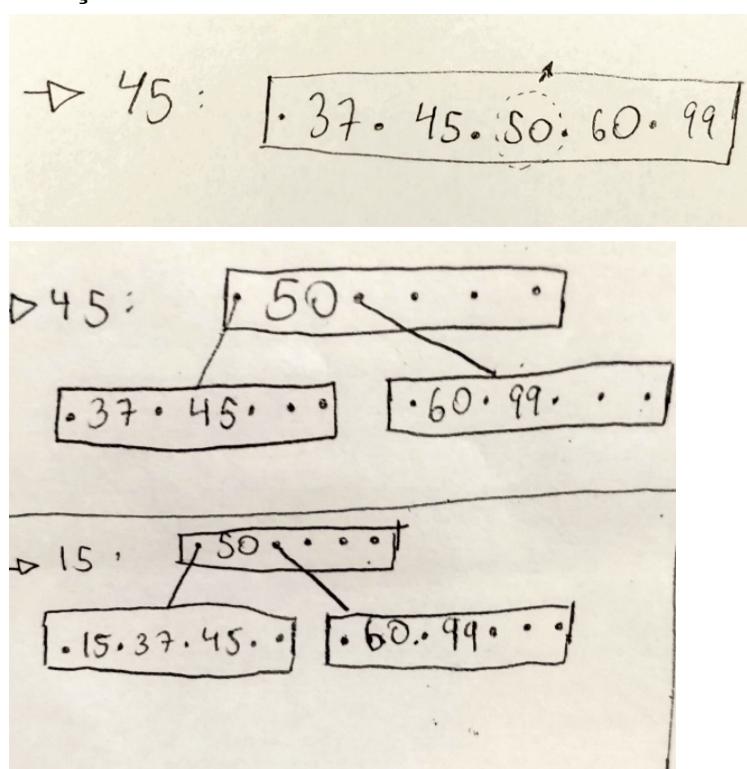
Inserção de 99 e 50:



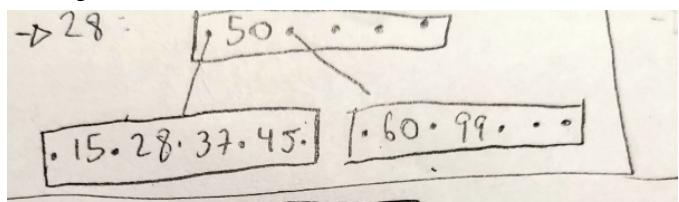
Inserção de 60 e 37:



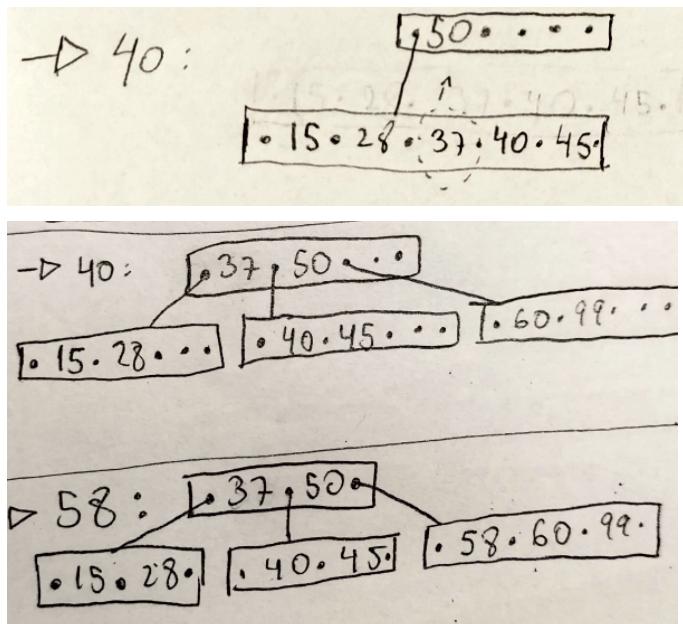
Inserção de 45 e 15:



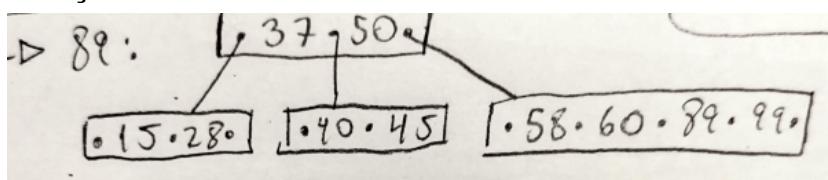
Inserção do 28:



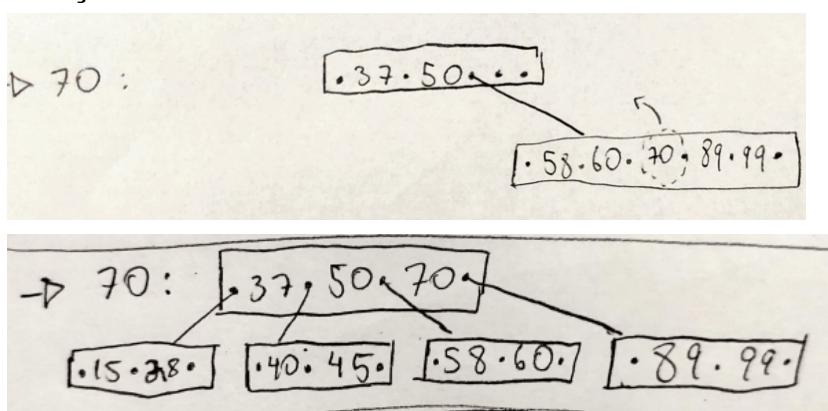
Inserção do 40 e 58:



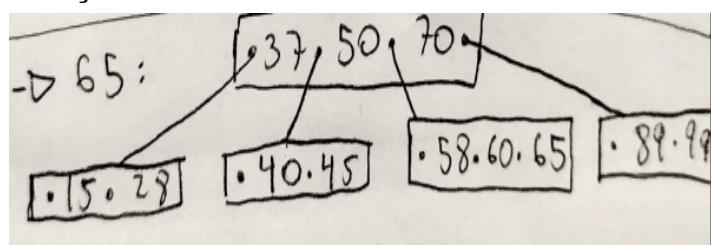
Inserção do 89:



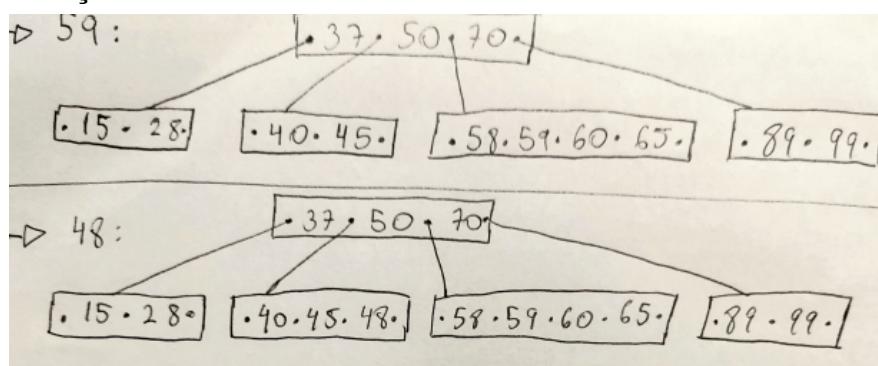
Inserção do 70:



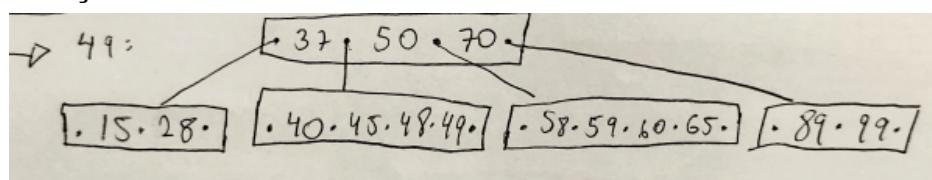
Inserção do 65:



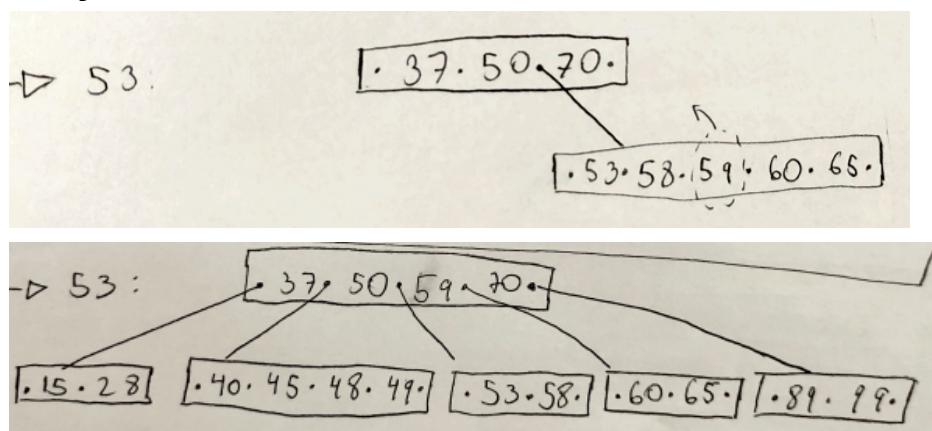
Inserção do 59 e 48



Inserção do 49:

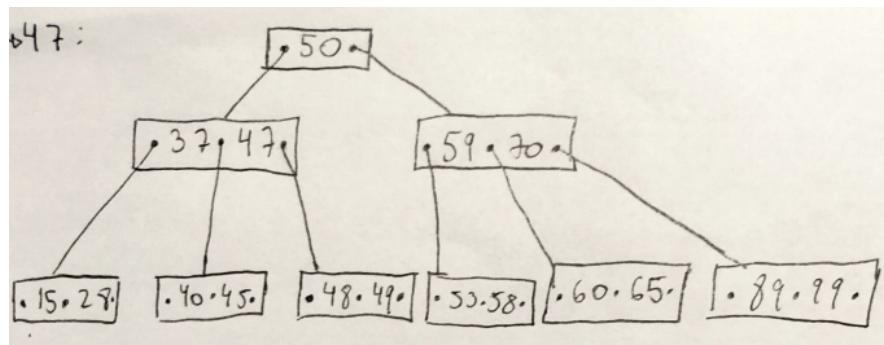
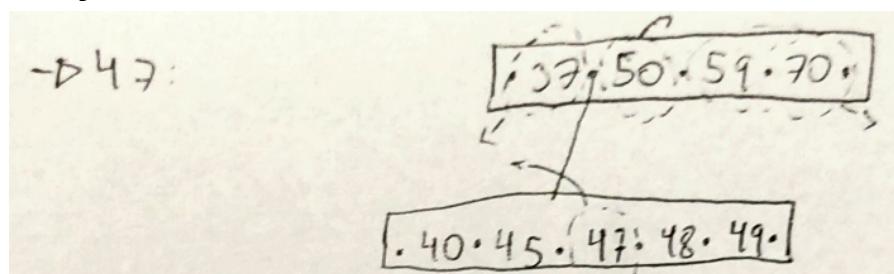


Inserção do 53:

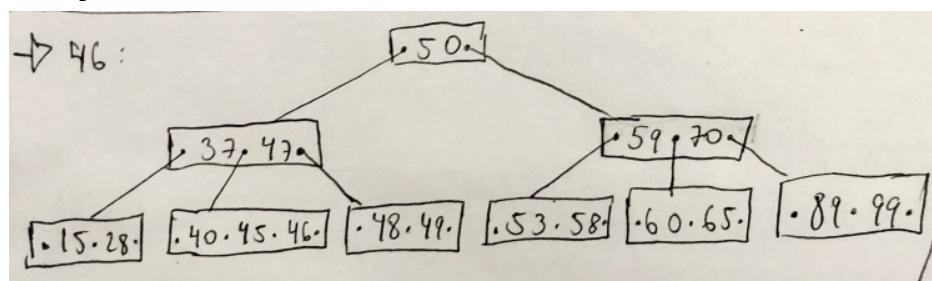


6) a)

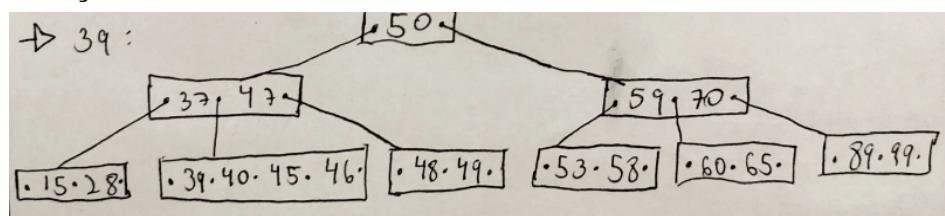
Inserção do 47:



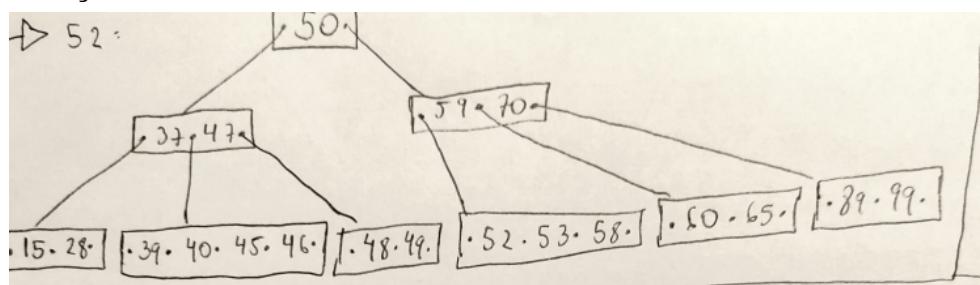
Inserção do 46:

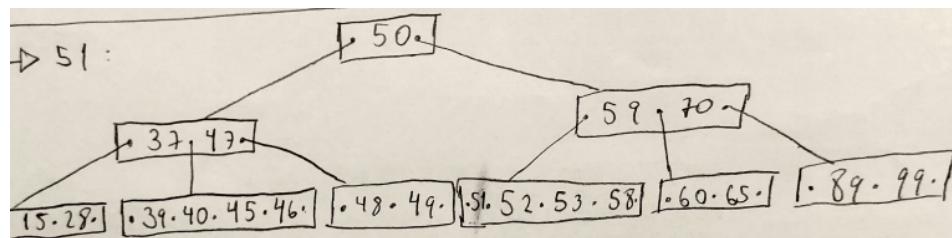
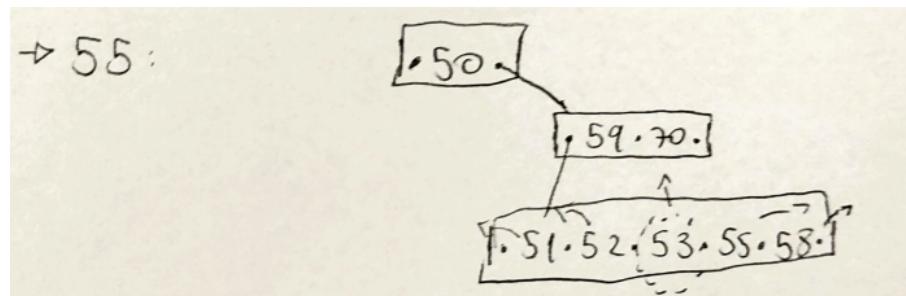


Inserção do 39

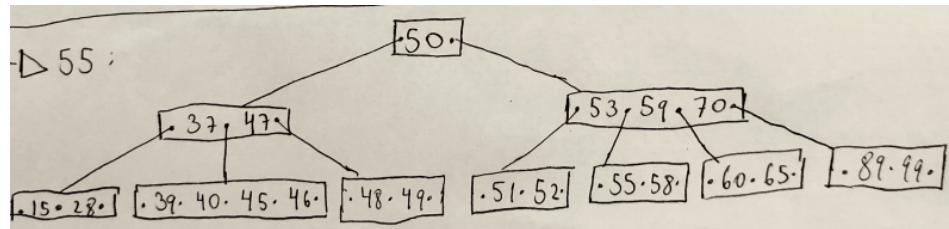


Inserção do 52:

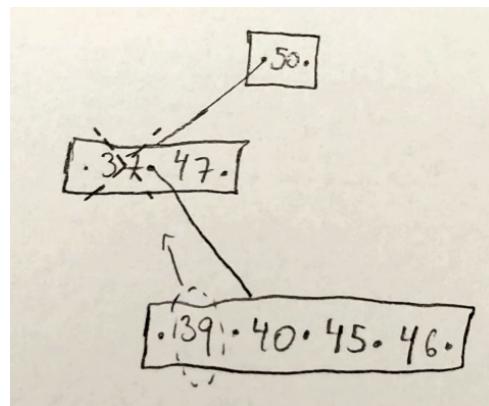


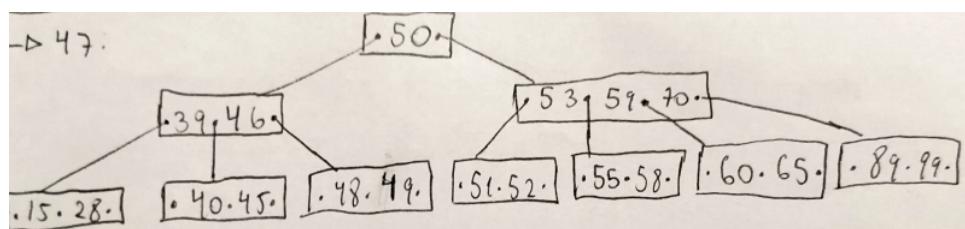
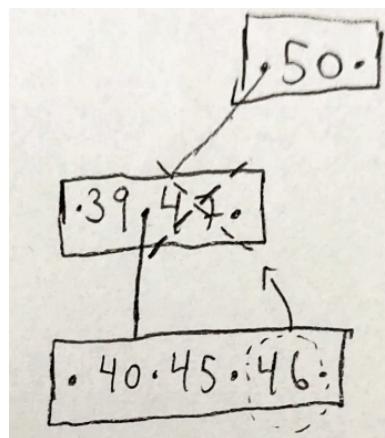
Inserção do 51:**Inserção do 55:**

→ 55 :

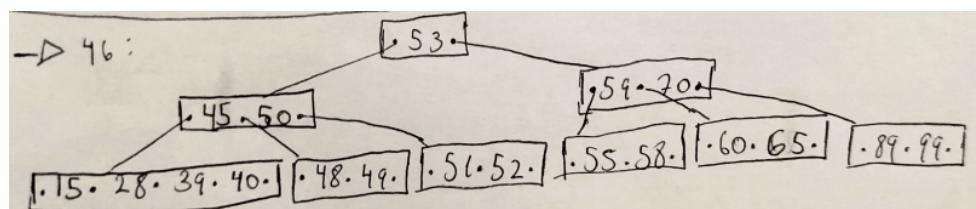
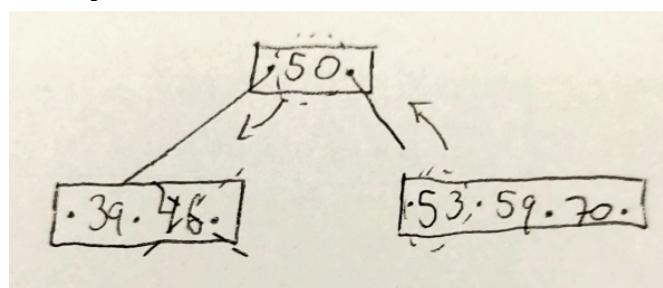


6 b)

Remoção do 37:**Remoção do 47:**



Remoção do 46:



Remoção do 65:

