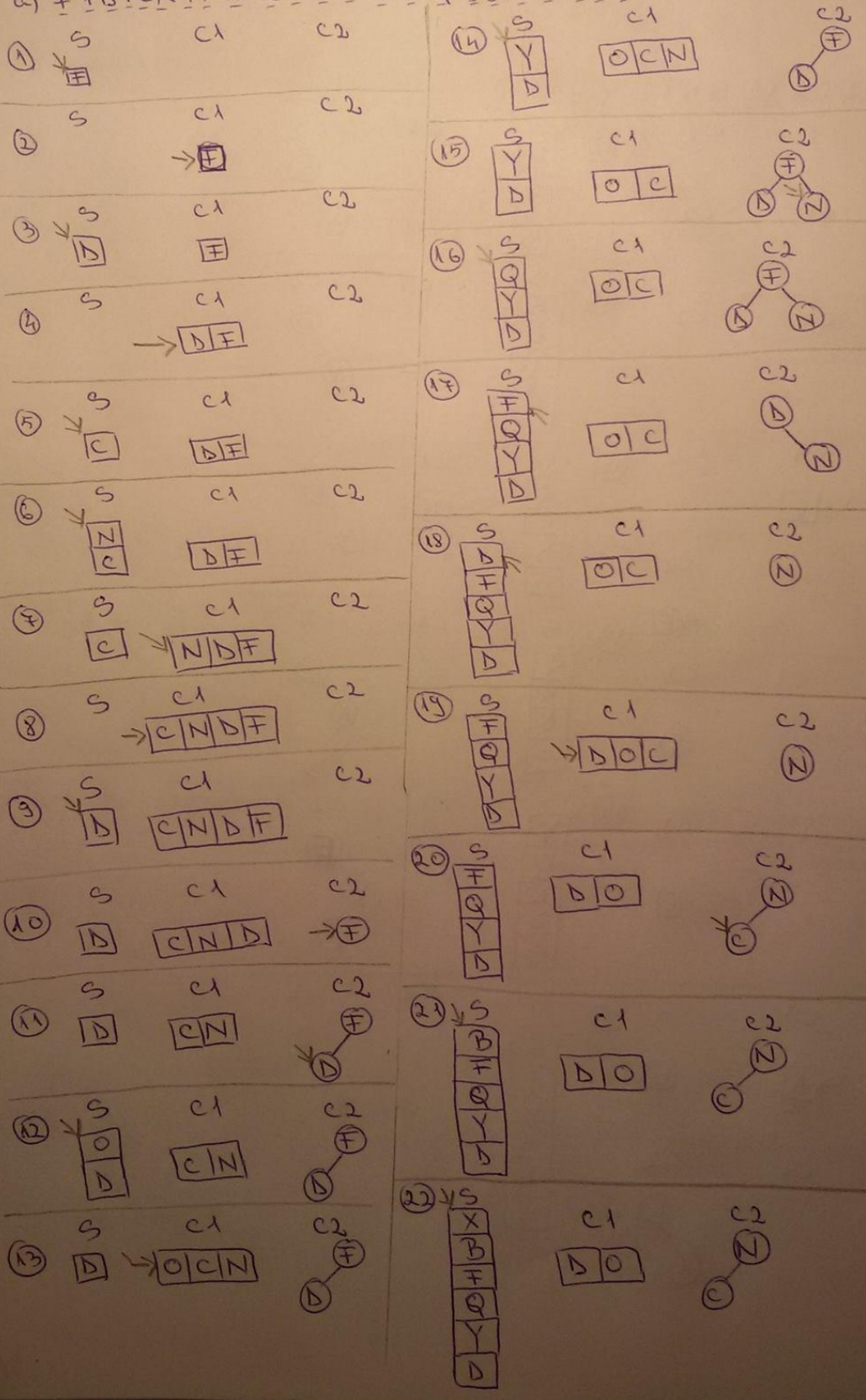
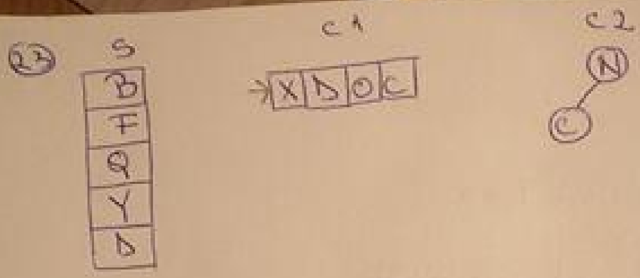
Test ASD

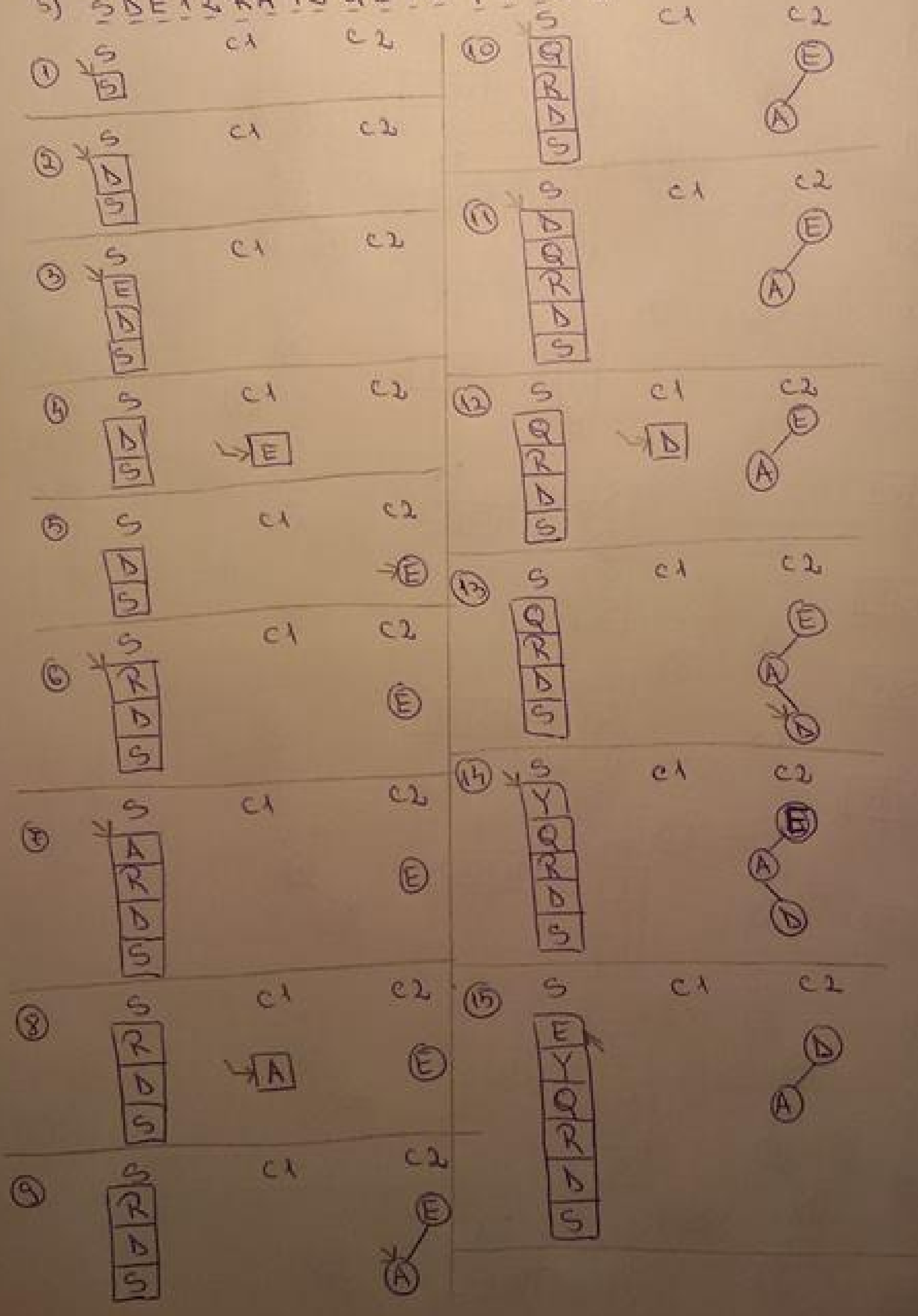
1)

a) F 1 D 1 C N 1 1 D 2 2 0 1 Y 2 Q 3 3 1 2 B X 1





5) SDE12RA12QD12Y333R



(16) S C1 C2

S
D
E
Y
Q
R
D
S

(A)

(18) S C1 C2

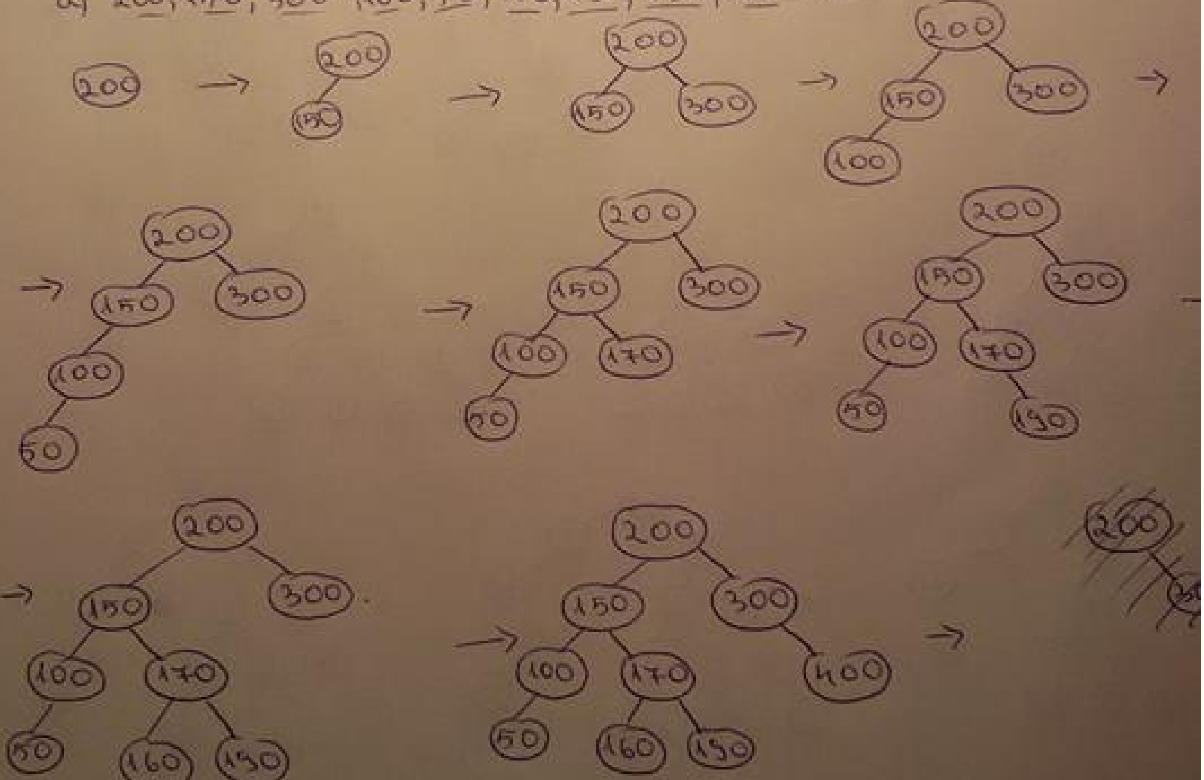
S
R
A
D
E
Y
Q
R
D
S

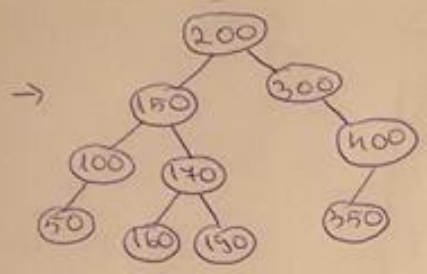
(17) S C1 C2

S
A
D
E
Y
Q
R
D
S

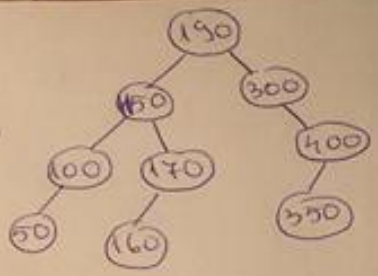
(2)

a) 200, 150, 300, 100, 50, 170, 190, 160, 400, 350

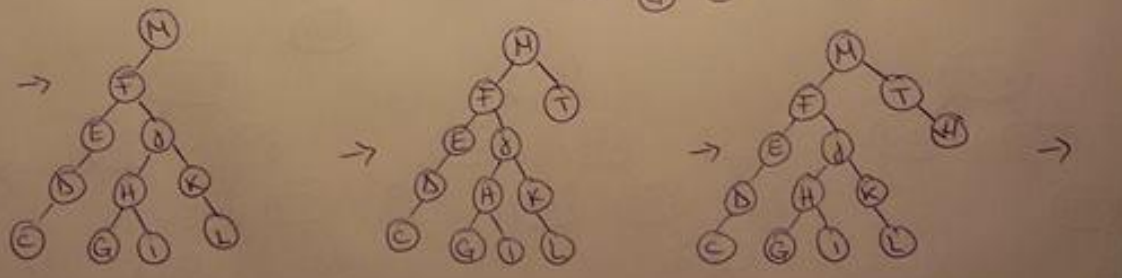


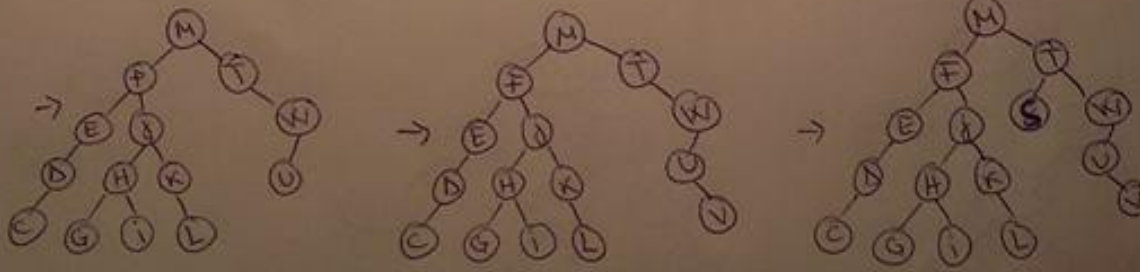


decapitare

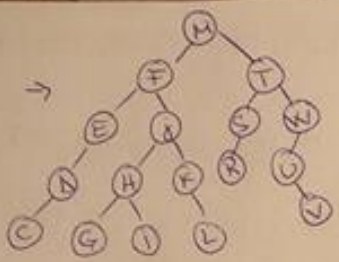


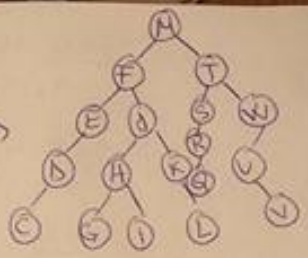
b) M F E D C G H I G K L T W U V S R Q



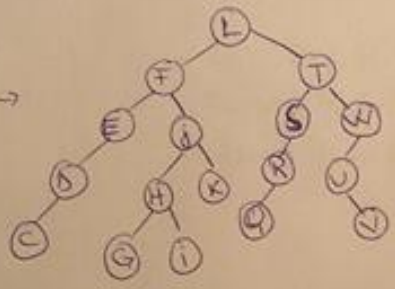


4/8

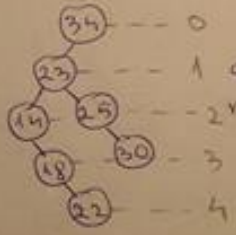




decapitare

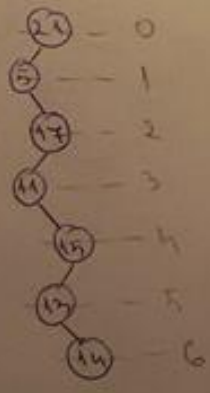


3) a)



Nu este șir de căutare întrucât arborele are înălțimea mai mică decât numărul nodurilor - 1 (4 < 7)

b)



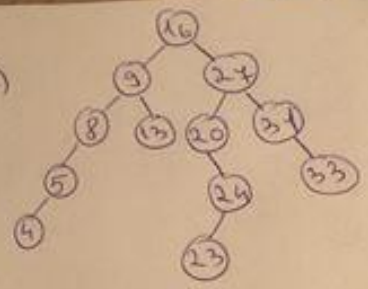
Este șir de căutare întrucât arborele are înălțimea egală cu numărul nodurilor - 1 (6 = 6)

4) b) 22, 33, 44, 66, 55, 44, 77

c) 22, 44, 33, 11, 55, 66, 77

5)

a)

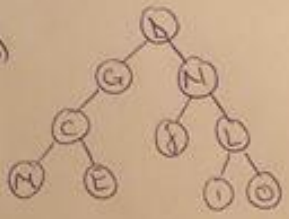


RSD: 16, 9, 8, 5, 4, 13, 27, 20, 24, 23, 31, 33

SRD: 4, 5, 8, 9, 13, 16, 20, 23, 24, 27, 31, 33

SDR: 4, 5, 8, 13, 9, 23, 24, 20, 33, 31, 27, 16

b)



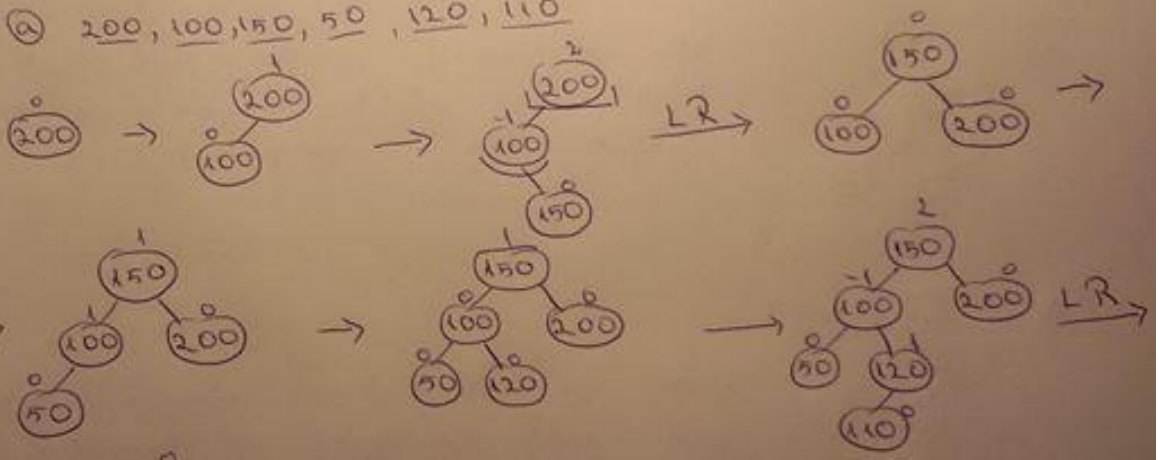
RSD: A, G, C, M, E, N, I, L, 1, O

SRD: M, C, E, G, A, I, N, 1, L, O

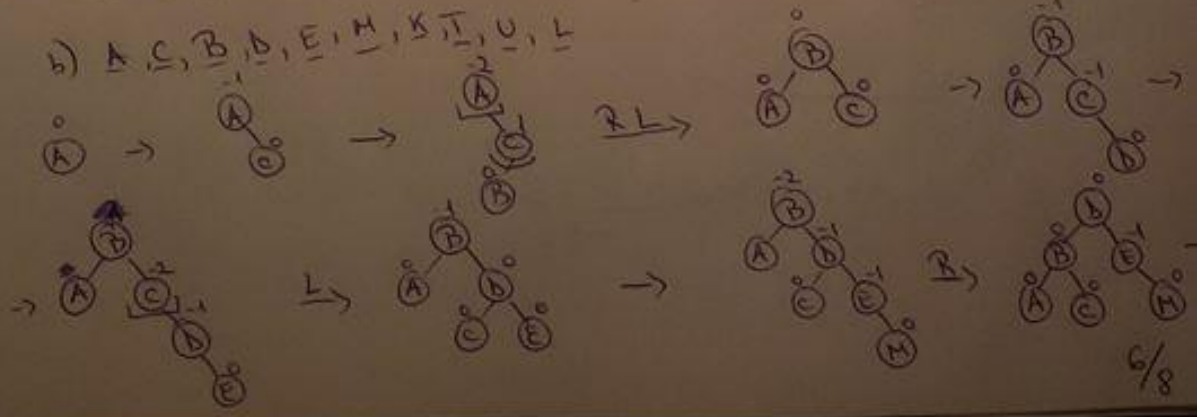
SDR: M, E, C, G, I, 1, O, L, N, A.

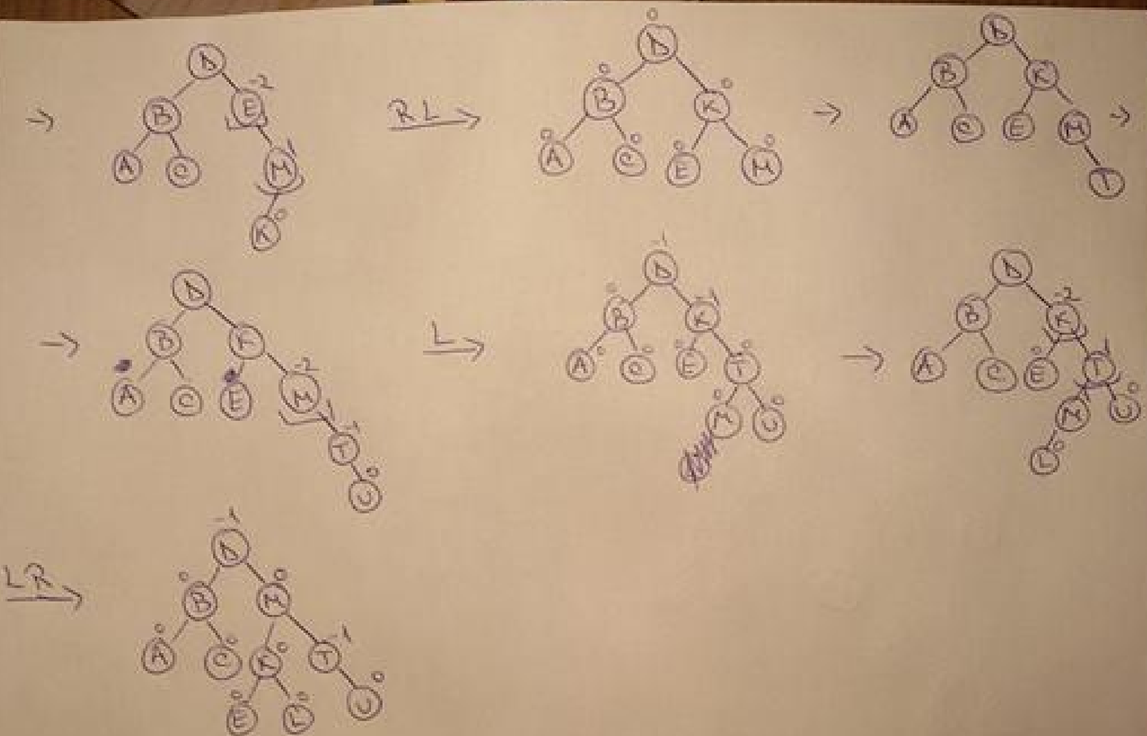
6)

a) 200, 100, 150, 50, 120, 110



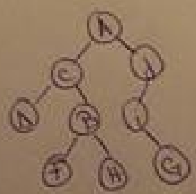
b) A, C, B, D, E, M, K, I, U, L





7) RSD: A C D B F H J I G

SRD: D C F B H A I G J



8) [1] [3] [6] [14] [15] [17] [19] [25]

F A H X N U T C

[4] [6] [14] [15] [17] [19] [25]

FA H X N U T C

[10] [14] [15] [17] [19] [25]

FAH X N U T C

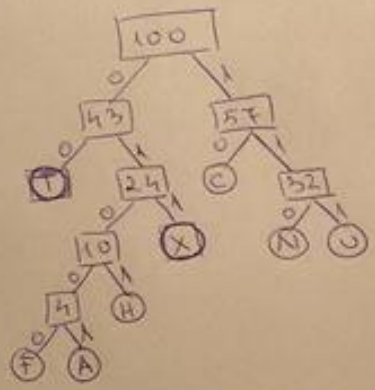
[15] [17] [19] [24] [25]

N U T FAHX C

19	24	25	32
T	FAHX	C	NU

25	32	43
C	NU	FAHXT

43	57	~~43~~
FAHXT	ENUC	~~FAHXT~~



T - 00
X - 011
H - 0101
F - 01000
A - 01001
C - 10
N - 110
U - 111

HNTNCFAH → 0101 110 00 110 10 01000 01001 0101

③ a) $T(n) = 2T(\frac{n}{2}) + O(n^2)$

$a = 2$
$b = 2$
$d = 2$

$2 < 4 \Rightarrow T(n) = O(n^2)$

b) $T(n) = 2T(\frac{n}{2}) + O(n)$

$a = 2$
$b = 2$
$d = 1$

$2 = 2 \Rightarrow T(n) = O(n \log n)$