

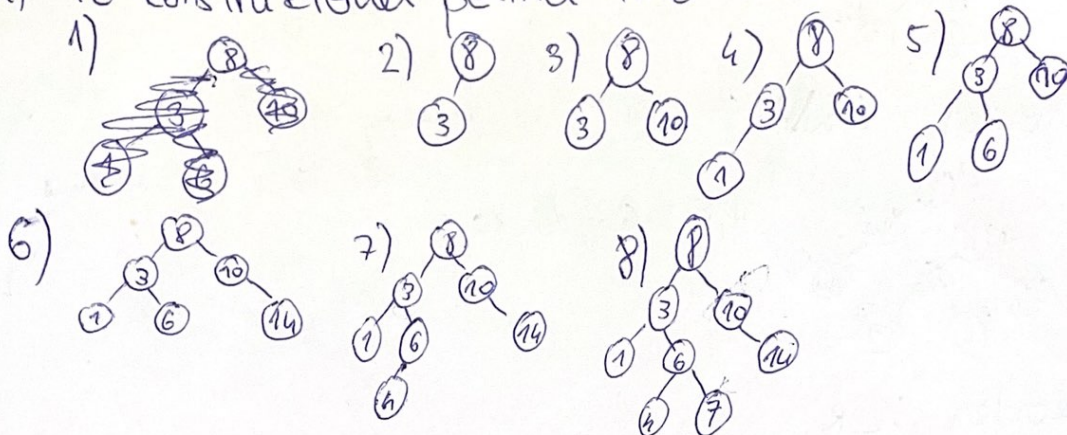
Java 9-BST - Detyrat e shtëpisë

Lënda: Hyrje në Algoritme

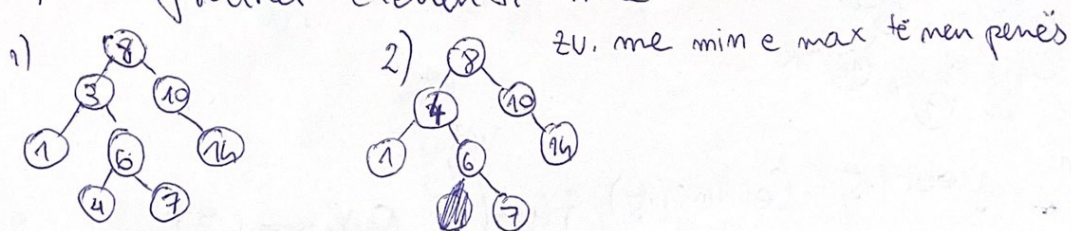
Olta Hasimja
G36

Detyra 1: Nga vargu i dhënë $A = \{8, 3, 10, 1, 6, 14, 4, 7\}$

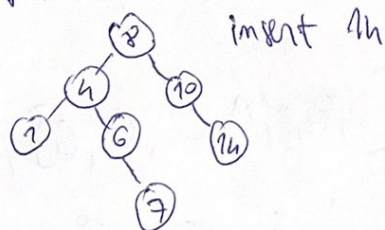
a) Të konstruëtohet pemë me BST



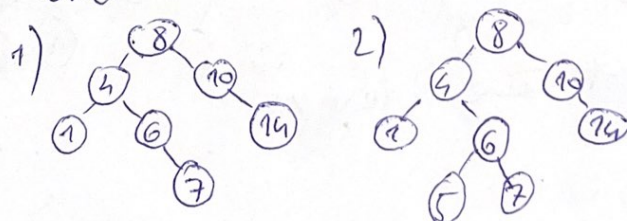
b) Të fshihet elementi me vlerë 3



c) Të shtohet elementi me vlerë 14



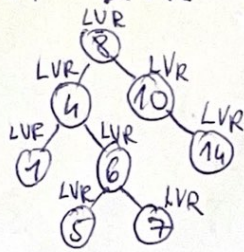
d) Të shtohet elementi me vlerë 5



e) Të vizitohet pena me një të

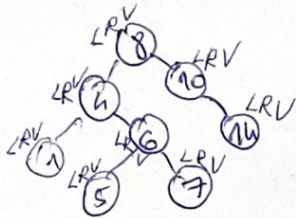
Olta Hasimja G3B

Inorden LVR



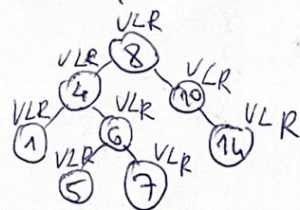
1, 4, 5, 6, 7, 8, 10, 14

Postorden LRV



1, 5, 7, 6, 4, 14, 10, 8

Preorden VLR



8, 4, 1, 6, 5, 7, 10, 14

f) Gjeneri floor(15), Ceiling(15), Floor(7), Ceiling(7)

floor 15 \Rightarrow 14

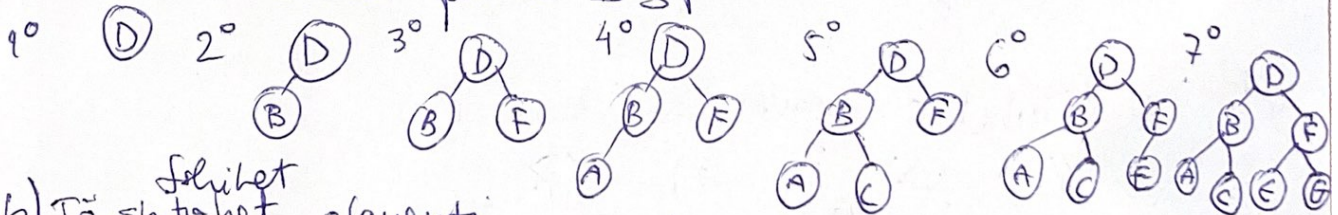
Floor(7) \Rightarrow 6

Ceiling 15 \Rightarrow search miss

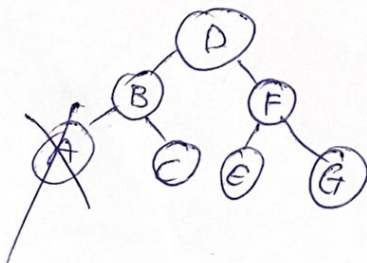
Floor(7) \Rightarrow 8

Detyra 2. Nga vargu i dhënë $A = \{D, B, F, A, C, E, G\}$;

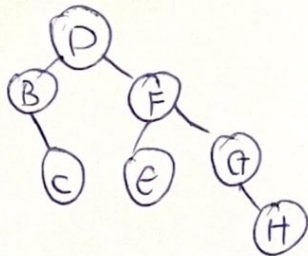
a) Të konstruohet pena BST



b) Të ~~shihet~~ ^{shihet} elementi me vlerë A



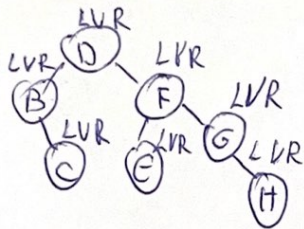
c. Të shtohet elementi me vlerë H Olla Haximja
G3B



d. Të vizitohet pemja me anë të:

linden LVR

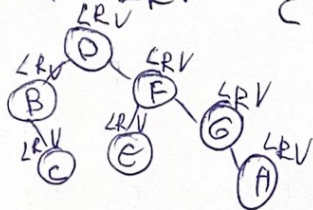
B, C, D, E, F, G, H



Postorden

LRV

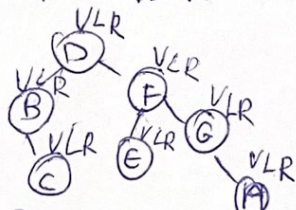
C, B, E, H, G, F, D



Preorden

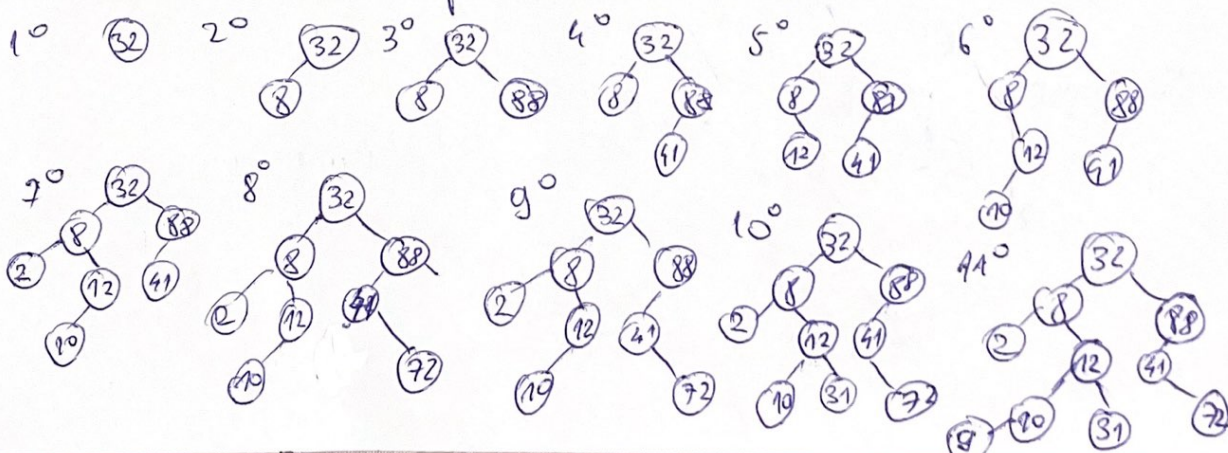
VL R

D, B, C, F, E, G, H

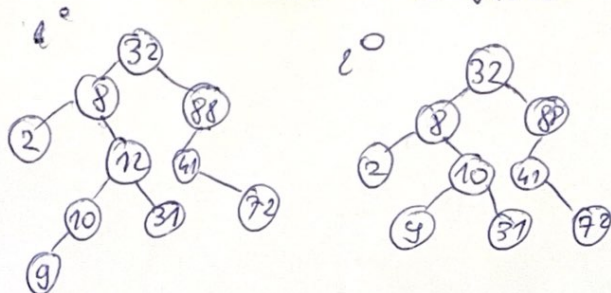


e. Gjemi floor E \Rightarrow D, ceiling E \Rightarrow F

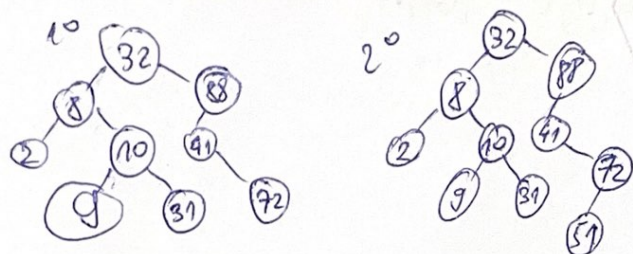
Detyra 3: Nga vanga i dhënë $A = \{32, 8, 88, 41, 12, 10, 2, 72, 12, 31, 9\}$
a) Të konstruktohet pemja me BST



b. Të shkruhet elementi me vlerë 12 Olta Hoxhinja
G3B

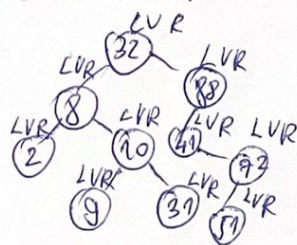


c. Të shkruhet elementi me vlerë 51



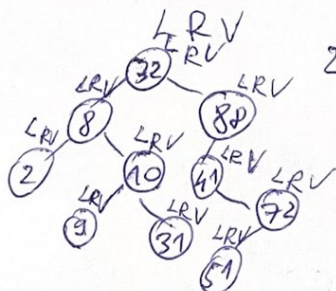
d. Të vizitohet para me anë të

Inorder LVR



2, 8, 9, 10, 31, 32, 41, 51, 72, 88

Postorder



2, 9, 31, 10, 8, 51, 72, 41, 88, 32

Preorder VLR



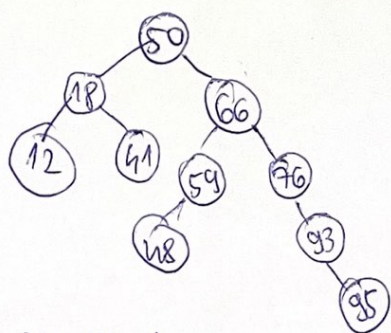
32, 8, 2, 10, 9, 31, 88, 41, 72, 51

e. Gjeni $\text{Floor}(39) \rightarrow 32$ $\text{Floor}(75) \rightarrow 72$ $\text{Floor}(12) \rightarrow 10$
 $\text{Ceiling}(39) \rightarrow 41$ $\text{Ceiling}(75) \rightarrow 88$ $\text{Ceiling}(12) \rightarrow 31$

Detypa 4: Janë dhënë kombinimet e elementeve të një BST në InOrder dhe PostOrder. Duke u bazuar në to, të ndërtohet trungu dhe pastaj të shkruhet edhe kombimi me preorder.

Inorder (LVR): 12, 18, 41, 48, 59, 66, 76, 93, 95

Postorder (LRV): 18, 12, 48, 41, 59, 93, 76, 66, 95, 50

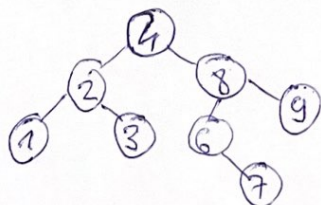


Preorder = 50, 18, 12, 41, 48, 59, 66, 76, 93, 95

Detypa 5: Janë dhënë kombinimet në Preorder dhe Postorder. Duke u bazuar në to, të ndërtohet trungu dhe pastaj të shkruhet kombinimi i InOrder.

Preorder (VLR): 4, 2, 1, 3, 8, 6, 7, 9

Postorder (LRV): 1, 3, 2, 7, 6, 9, 8, 4



InOrder: 1, 2, 3, 4, 6, 7, 8, 9

Olta Haxhinja GIB