Lucrare de laborator L2

Codul laboratorului: L2

Descriere: Programare recursiva in Lisp (2)

Data: 08.12.2020

Problema 4: Sa se converteasca un arbore de tipul (2) la un arbore de tipul (1).

$$nrDescendenti(l_2, l_3) = \begin{cases} 0, & l_2\ vida \wedge l_3\ vida \\ 1, & l_2\ vida \vee l_3\ vida \\ 2, & altfel \end{cases}$$

$$convert(l_1 l_2 l_3) = \begin{cases} \emptyset, & l\ vida \\ l_1 \oplus nrDescendenti(l_2, l_3) \oplus convert(l_2) \oplus convert(l_3), & altfel \end{cases}$$

Exemple de testare:

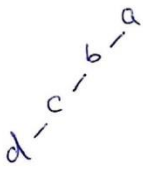
arborele vid => NIL

=> (a)

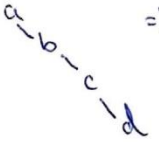

=> (a (b))

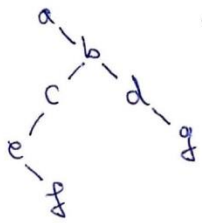

=> (a () (b))

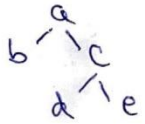

=> (a (b) (c))

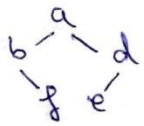

=> (a (b (c (d))))

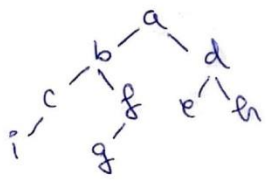
;

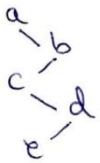

=> (a () (b () (c () (d))))


=> (a () (b (c (e () (f))) (d () (g))))


=> (a (b) (c (d) (e)))


=> (a (b () (f)) (d (e)))


=> (a (b (c (i)) (f (g))) (d (e) (h)))


=> (a () (b (c () (d (e)))))