

Laboratory 7

9. Write a function that removes all occurrences of an atom from any level of a list.

$$\text{myRemoveAtom}(\text{atom}, l_1 \dots l_m) = \begin{cases} \text{nil}, & \text{if } m = 0 \\ \text{myRemoveAtom}(\text{atom}, l_1 \dots l_m), & \text{if } l_1 \text{ is a list} \\ \text{nil}, & \text{if } l_1 = \text{atom} \\ l_1 l_2 \dots l_m, & \text{otherwise} \end{cases}$$

where $l_1 \dots l_m$ is the sublist

$$\text{myMain}(\text{atom}, l_1 l_2 \dots l_m) = \text{myRemoveAtom}(\text{atom}, l_1 \dots l_m)$$