

Math models – Lab 2 – Prolog 1

$$\text{mypro}(\underbrace{l_1}_{\overline{H}}, \underbrace{l_2, \dots, l_n}_T) = \begin{cases} \underbrace{l_1}_{\overline{H}} * \underbrace{\text{mypro}(l_2 \dots l_n)}_{RT}, & l_1 = \text{even} \\ \underbrace{\text{mypro}(l_2 \dots l_n)}_{RT}, & \text{otherwise} \end{cases}$$

$$\text{suma}(l_1, l_2, \dots, l_m) = \begin{cases} 0, & m=0 \\ l_1 + \text{suma}(l_2, \dots, l_m) \end{cases}$$

Step 1: Sum Tail

Step 2: Sum Total

$$\text{ins}(\underbrace{l_1 \dots l_m}_{\substack{\text{H} \quad | \quad \text{T}}}, E, ip, cp) = \begin{cases} [E]_{m=1} \\ E \cup \underbrace{l_1}_{\text{H}} \cup \underbrace{\text{ins}(l_2 \dots l_m, ip, cp+1)}_{\text{RT}}, & cp = ip \\ \underbrace{l_1}_{\text{H}} \cup \underbrace{\text{ins}(l_2 \dots l_m, ip, cp+1)}_{\text{RT}}, & cp \neq ip \end{cases}$$