

# Inteligência Artificial — Aula 1

**1.** 1. Verifique se os seguintes pares de termos são unificáveis, e em caso afirmativo, indique a substituição obtida. Apresente todos os passos do algoritmo que aplicou.

- (a)  $\text{voo}(\text{paris}, \text{A})$   $\text{voo}(\text{B}, \text{porto})$ .
- (b)  $\text{voo}(\text{paris}, \text{porto})$   $\text{voo}(\text{A}, \text{A})$ .
- (c)  $\text{viagem}(\text{X}, \text{porto})$   $\text{viagem}(\text{A}, \text{A})$ .
- (d)  $\text{viagem}(\text{X}, \text{Y})$   $\text{viagem}(\text{A}, \text{A})$ .
- (e)  $\text{cidade}(\text{X})$   $\text{pais}(\text{portugal})$ .
- (f)  $\text{distrito}(\text{porto})$   $\text{porto}$ .
- (g)  $\text{distrito}(\text{porto})$   $\text{X}$ .
- (h)  $\text{paris}$  'paris'.
- (i)  $\text{Londres}$   $\text{londres}$ .
- (j)  $\text{Londres}$   $\text{Paris}$ .
- (k)  $\text{g}(\text{a}, \text{Y})$   $\text{g}(\text{X}, \text{b})$ .
- (l)  $\text{g}(\text{d}, \text{a}(\text{Z}, \text{c}))$   $\text{g}(\text{Z}, \text{a}(\text{b}, \text{c}))$ .
- (m)  $\text{a}(\text{B}, \text{c}, \text{d}(\text{F}, \text{f}, \text{g}(\text{H}, \text{i}, \text{j})))$   $\text{a}(\text{b}, \text{C}, \text{d}(\text{e}, \text{E}, \text{g}(\text{h}, \text{i}, \text{J})))$ .
- (n)  $\text{m}(\text{Y}, \text{h}(\text{a}, \text{X}))$   $\text{m}(\text{A}, \text{h}(\text{B}, \text{b}))$ .
- (o)  $\text{p}(\text{t}(\text{X}), \text{t}(\text{X}, \text{b}))$ )  $\text{p}(\text{t}(\text{a}), \text{t}(\text{Z}, \text{Z}))$ )
- (p)  $\text{q}(\text{X}, \text{Y}, \text{Y}, \text{h}(\text{Z}, \text{X}))$   $\text{q}(\text{A}, \text{B}, \text{A}, \text{h}(\text{B}, \text{C}))$ .
- (q)  $\text{q}(\text{X}, \text{Y}, \text{y}, \text{h}(\text{Z}, \text{X}))$   $\text{q}(\text{A}, \text{b}, \text{A}, \text{h}(\text{B}, \text{c}))$ .
- (r)  $\text{r}(\text{V}, \text{X}, \text{X}, \text{V})$   $\text{r}(\text{Z}, \text{Z}, \text{Y}, \text{c})$ .
- (s)  $\text{s}(\text{t}(\text{X}, \text{Z}))$   $\text{s}(\text{t}(\text{a}, \text{t}(\text{X}, \text{b})))$ .
- (t)  $\text{t}(\text{A}, \text{B}, \text{d}(\text{a}, \text{n}))$   $\text{t}(\text{d}(\text{U}, \text{X}), \text{Y}, \text{d}(\text{U}, \text{Z}))$ .
- (u)  $\text{u}(\text{b}(\text{X}, \text{Y}), \text{C}, \text{c}(\text{D}, \text{z}))$   $\text{u}(\text{b}(\text{c}(\text{A}, \text{B}), \text{B}), \text{Y}, \text{X})$ .
- (v)  $\text{v}(\text{Z}, \text{f}(\text{D}, \text{D}, \text{E}), \text{A} + \text{B}, 15)$   $\text{v}(\text{C}, \text{f}(\text{A}, 15, \text{B}), \text{C}, \text{E})$ .
- (w)  $\text{X}$   $\text{f}(\text{X})$ .