

# Inteligência Artificial — Soluções – Aula 1

1.

- a)  $\text{voo}(\text{paris}, \text{A}) = \text{voo}(\text{B}, \text{porto})$ .  
 $\text{A} = \text{porto}$ ,  $\text{B} = \text{paris}$
- b)  $\text{voo}(\text{paris}, \text{porto}) = \text{voo}(\text{A}, \text{A})$ .  
no.
- c)  $\text{viagem}(\text{X}, \text{porto}) = \text{viagem}(\text{A}, \text{A})$ .  
 $\text{X} = \text{A} = \text{porto}$
- d)  $\text{viagem}(\text{X}, \text{Y}) = \text{viagem}(\text{A}, \text{A})$ .  
 $\text{X} = \text{Y} = \text{A}$
- e)  $\text{cidade}(\text{X}) = \text{pais}(\text{portugal})$ .  
no
- f)  $\text{distrito}(\text{porto}) = \text{porto}$ .  
no
- g)  $\text{distrito}(\text{porto}) = \text{X}$ .  
 $\text{X} = \text{distrito}(\text{porto})$
- h)  $\text{paris} = \text{'paris'}$ .  
yes
- i)  $\text{Londres} = \text{londres}$ .  
 $\text{Londres} = \text{londres}$
- j)  $\text{Londres} = \text{Paris}$ .  
 $\text{Londres} = \text{Paris}$
- k)  $\text{g}(\text{a}, \text{Y}) = \text{g}(\text{X}, \text{b})$ .  
 $\text{Y} = \text{b}$ ,  $\text{X} = \text{a}$
- l)  $\text{g}(\text{d}, \text{a}(\text{Z}, \text{c})) = \text{g}(\text{Z}, \text{a}(\text{b}, \text{c}))$ .  
no
- m)  $\text{a}(\text{B}, \text{c}, \text{d}(\text{F}, \text{f}, \text{g}(\text{H}, \text{i}, \text{j}))) = \text{a}(\text{b}, \text{C}, \text{d}(\text{e}, \text{E}, \text{g}(\text{h}, \text{i}, \text{J})))$ .  
 $\text{B} = \text{b}$ ,  $\text{F} = \text{e}$ ,  $\text{H} = \text{h}$ ,  $\text{J} = \text{j}$ ,  $\text{C} = \text{c}$ ,  $\text{E} = \text{f}$

n)  $m(Y, h(a, X)) = m(A, h(B, b))$ .  
Y = A, X = b, B = a

o)  $p(t(X, t(X, b))) = p(t(a, t(Z, Z)))$ .  
no

p)  $q(X, Y, Y, h(Z, X)) = q(A, B, A, h(B, C))$ .  
X = Y = Z = A = B = C

q)  $q(X, Y, y, h(Z, X)) = q(A, b, A, h(B, c))$ .  
no

r)  $r(V, X, X, V) = r(Z, Z, Y, c)$ .  
V = X = Z = Y = c

s)  $s(t(X, Z)) = s(t(a, t(X, b)))$ .  
X = a, Z = t(a, b)

t)  $t(A, B, d(a, n)) = t(d(U, X), Y, d(U, Z))$ .  
A = d(a, X), B = Y, U = a, Z = n

u)  $u(b(X, Y), C, c(D, z)) = u(b(c(A, B), B), Y, X)$ .  
X = c(D, z), Y = C = B = z, D = A

v)  $v(Z, f(D, D, E), A+B, 15) = v(C, f(A, 15, B), C, E)$ .  
Z = C = 15+15, D = E = A = B = 15

w)  $X = f(X)$ . # com teste de ocorrência  
no

w)  $X = f(X)$ . # sem teste de ocorrência  
X=f(f(f(f(...