Introducción a la IA

Agentes Inteligentes

Agentes Resolventes-Problemas

Ejercicio 1

Ejercicio 2

Ejercicio 3

Ejercicio 4

Ejercicio 5

Ejercicio 6

Ejercicio 7

Ejercicio 8

Diagrama

Descripción generada automáticamente

|  |  |  |
| --- | --- | --- |
| **M** | **Lista Abierta** | **Lista Cerrada** |
| vacío | A | vacío |
| A | B, C | A |
| B | C, D | A, B |
| C | D, E, F, G | A, B, C |
| D | E, F, G, H, I | A, B, C, D |
| E | F, G, H, I, J, K | A, B, C, D, E |
| F | G, H, I, J, K, L | A, B, C, D, E, F |
| G | H, I, J, K, L, M, N | A, B, C, D, E, F, G |
| H | I, J, K, L, M, N | A, B, C, D, E, F, G, H |
| I | J, K, L, M, N | A, B, C, D, E, F, G, H, I |
| J | K, L, M, N | A, B, C, D, E, F, G, H, I, J |
| K | L, M, N | A, B, C, D, E, F, G, H, I, J, K |

Ejercicio 9

Diagrama

Descripción generada automáticamente

|  |  |  |
| --- | --- | --- |
| **M** | **Lista Abierta** | **Lista Cerrada** |
| vacío | A | Vacío |
| A | B, C, D | A |
| B | E, C, D | A, B |
| E | J, K, C, D | A, B, E |
| J | K, C, D | A, B, E, J |
| K | C, D | A, B, E, J, K |
| C | F, G, D | A, B, E, J, K, C |
| F | L, G, D | A, B, E, J, K, C, F |
| L | G, D | A, B, E, J, K, C, F, L |
| G | M, D | A, B, E, J, K, C, F, L, G |
| M | D | A, B, E, J, K, C, F, L, G, M |

Ejercicio 10

Diagrama

Descripción generada automáticamente

|  |  |  |
| --- | --- | --- |
| **M** | **Lista Abierta** | **Lista Cerrada** |
| vacío | A(5) | vacío |
| A(5) | C(4)A, B(6)A, D(6)A | A(5) |
| C(4)A | F(3)C, H(4)C, G(5)C, B(6)A, D(6)A | A(5), C(4)A |
| F(3)C | L(2)F, M(4)F H(4)C, G(5)C, B(6)A, D(6)A | A(5), C(4)A, F(3)C |
| L(2)F | M(4)F H(4)C, G(5)C, B(6)A, D(6)A | A(5), C(4)A, F(3)C, L(2)F |
| M(4)F | S(0)M, H(4)C, T(5)M, G(5)C, B(6)A, D(6)A | A(5), C(4)A, F(3)C, L(2)F, M(4)F |
| S(0)M | H(4)C, T(5)M, G(5)C, B(6)A, D(6)A | A(5), C(4)A, F(3)C, L(2)F, M(4)F, S(0)M |
|  |  | S(0)M, M(4)F, F(3)C, C(4)A, A(5) |

Ejercicio 11

Diagrama

Descripción generada automáticamente

|  |  |  |
| --- | --- | --- |
| **M** | **Lista Abierta** | **Lista Cerrada** |
| vacío | A(5+0) | vacío |
| A(5) | C(5)A, B(7)A, D(7)A | A(5) |
| C(5)A | F(5)C, H(6)C, G(7)C, B(6)A, D(6)A | A(5), C(5)A |
| F(5)C | L(5)F, M(7)F, H(6)C, G(7)C, B(6)A, D(6)A | A(5), C(5)A, F(5)C |
| L(5)F | M(7)F, H(6)C, G(7)C, B(6)A, D(6)A | A(5), C(5)A, F(5)C, L(5)F |
| H(6)C | Q(8)H, R(7)H, M(7)F, G(7)C, B(6)A, D(6)A | A(5), C(5)A, F(5)C, L(5)F, H(6)C |
| B(6)A | E(8)B, Q(8)H, R(7)H, M(7)F, G(7)C, D(6)A | A(5), C(5)A, F(5)C, L(5)F, H(6)C, B(6)A |
| D(6)A | I(9)D, E(8)B, Q(8)H, R(7)H, M(7)F, G(7)C | A(5), C(5)A, F(5)C, L(5)F, H(6)C, B(6)A, D(6)A |
| R(7)H | U(8)R, I(9)D, E(8)B, Q(8)H, M(7)F, G(7)C | A(5), C(5)A, F(5)C, L(5)F, H(6)C, B(6)A, D(6)A, R(7)H |
| M(7)F | S(4)M, T(9)M, U(8)R, I(9)D, E(8)B, Q(8)H, G(7)C | A(5), C(5)A, F(5)C, L(5)F, H(6)C, B(6)A, D(6)A, R(7)H, M(7)F |
| S(4)M | T(9)M, U(8)R, I(9)D, E(8)B, Q(8)H, G(7)C | A(5), C(5)A, F(5)C, L(5)F, H(6)C, B(6)A, D(6)A, R(7)H, M(7)F, S(4)M |
|  |  | S(4)M, M(7)F, F(5)C, C(5)A, A(5) |

Ejercicio 12

Agentes Basados en Conocimiento

Planificación



Ejercicio 2

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

Principio de resolución:

|  |  |
| --- | --- |
| ~~BRAZOLIBRE()~~  SOBRELAMESA(A)  SOBRELAMESA(B)  SOBRE(C, A)  DESPEJADO(C)  DESPEJADO(B)  BRAZOLIBRE(), SOBRE(C, A), SOBRELAMESA(A), SOBRELAMESA(B), DESPEJADO(C), DESPEJADO(B) |  |
| ~~BRAZOLIBRE()~~  ~~SOBRE(A, B)~~  ~~DESPEJADO(A)~~  ~~BRAZOLIBRE()~~, ~~SOBRE(A, B)~~, ~~DESPEJADO(A)~~  **DESAPILAR(A, B)**  AGARRADO(A)  **BAJAR(A)**  SOBRELAMESA(B)  SOBRE(C, A)  DESPEJADO(C)  DESPEJADO(B)  BRAZOLIBRE(), SOBRE(C, A), SOBRELAMESA(A), SOBRELAMESA(B), DESPEJADO(C), DESPEJADO(B) |  |
| AGARRADO(A)  DESPEJADO(B)  SOBRELAMESA(B)  SOBRE(C, A)  DESPEJADO(C)  DESPEJADO(B)  BRAZOLIBRE(), SOBRE(C, A), SOBRELAMESA(A), SOBRELAMESA(B), DESPEJADO(C), DESPEJADO(B) |  |
|  |  |
|  |  |

Lógica Difusa

Reconocimiento de Patrones

Redes Neuronales

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Entrada | Salida | Pesos | Salida calculada | Ajuste de pesos | Error |
| Primera iteración | | | | | |
|  | 0 |  | U = 1,5  Y = 1 |  | -1 |
|  | 0 |  | U = -2  Y = 0 |  | 0 |
|  | 0 |  | U = 0,5  Y = 1 |  | -1 |
|  | 1 |  | U = -4  Y = 0 |  | 1 |
| Segunda iteración | | | | | |
|  | 0 |  | U = 0,5  Y = 1 |  | -1 |
|  | 0 |  | U = -4  Y = 0 |  | 0 |
|  | 0 |  | U = -2,5  Y = 0 |  | 0 |
|  | 1 |  | U = -5  Y = 0 |  | 0 |
| Tercer iteración | | | | | |
|  | 0 |  | U = -1,5  Y = 0 |  | 0 |
|  | 0 |  | U = -4  Y = 0 |  | 0 |
|  | 0 |  | U = -2,5  Y = 0 |  | 0 |
|  | 1 |  | U = -5  Y = 0 |  | 0 |