

Exercício 7

Jogo A

(a) Jogador (X)

(b) Ações $\left(\begin{array}{c|c|c} x & 0 & 0 \\ \hline x & 0 & 0 \\ \hline x & & \end{array}, \begin{array}{c|c|c} x & x & 0 \\ \hline x & 0 & 0 \\ \hline x & x & x \end{array} \right)$

(c) Resultados $\left(\begin{array}{c|c|c} x & 0 & 0 \\ \hline x & 0 & 0 \\ \hline x & & \end{array}, \begin{array}{c|c|c} x & x & 0 \\ \hline x & 0 & 0 \\ \hline x & x & x \end{array} \right) = \begin{array}{c|c|c} x & 0 & 0 \\ \hline x & 0 & 0 \\ \hline x & & \end{array}$

(d) Terminal $\left(\begin{array}{c|c|c} x & 0 & 0 \\ \hline x & 0 & 0 \\ \hline x & & \end{array} \right) = \text{True}$

(e) Utilidade $\left(\begin{array}{c|c|c} x & 0 & 0 \\ \hline x & 0 & 0 \\ \hline x & & \end{array} \right) = 1$

Jogo B

(a) Jogador (O)

(b) Ações $\left\{ \begin{array}{c|c|c} x & 0 & 0 \\ \hline 0 & x & x \\ \hline x & 0 & 0 \end{array}, \begin{array}{c|c|c} x & 0 & 0 \\ \hline x & x & x \\ \hline x & 0 & 0 \end{array} \right\}$

(c) Resultados $\left\{ \begin{array}{c|c|c} x & 0 & 0 \\ \hline x & x & x \\ \hline x & 0 & 0 \end{array}, \begin{array}{c|c|c} x & 0 & 0 \\ \hline x & x & x \\ \hline x & 0 & 0 \end{array} \right\} = \begin{array}{c|c|c} x & 0 & 0 \\ \hline 0 & x & x \\ \hline x & 0 & 0 \end{array}$

(d) Terminal $\left\{ \begin{array}{c|c|c} x & 0 & 0 \\ \hline 0 & x & x \\ \hline x & 0 & 0 \end{array} \right\} = \text{False}$

Jogo C

(a) Jogador (X)

(b) Ações $\left\{ \begin{array}{c|c|c} x & 0 & x \\ \hline x & & 0 \\ \hline 0 & x & \end{array}, \begin{array}{c|c|c} x & 0 & x \\ \hline x & 0 & x \\ \hline x & 0 & x \end{array}, \begin{array}{c|c|c} x & 0 & x \\ \hline x & 0 & x \\ \hline 0 & x & \end{array} \right\}$

(c) Resultados $\left\{ \begin{array}{c|c|c} x & 0 & x \\ \hline x & & 0 \\ \hline 0 & x & \end{array}, \begin{array}{c|c|c} x & 0 & x \\ \hline x & 0 & x \\ \hline x & 0 & x \end{array}, \begin{array}{c|c|c} x & 0 & x \\ \hline x & 0 & x \\ \hline 0 & x & \end{array} \right\} = \begin{array}{c|c|c} x & 0 & x \\ \hline x & 0 & x \\ \hline 0 & x & \end{array}$

(d) Terminal $\left\{ \begin{array}{c|c|c} x & 0 & x \\ \hline x & & 0 \\ \hline 0 & x & \end{array} \right\} = \text{True}$

(e) Utilidade $\left\{ \begin{array}{c|c|c} x & 0 & x \\ \hline x & & 0 \\ \hline 0 & x & \end{array} \right\} = 1$

Jogo D

(a) Jogador (O)

(b) Ações $\{ \}$

(c) Resultados $\{ \}$

(d) Terminal $\left\{ \begin{array}{c|c|c} x & 0 & 0 \\ \hline x & & \end{array} \right\} = \text{True}$

(e) Utilidade $\left\{ \begin{array}{c|c|c} x & 0 & 0 \\ \hline x & & \end{array} \right\} = 1$

Tree 8

Tree 0:
Min value
0

X		0
	X	X
X	0	0

Tree x

X		0
X	X	X
X	0	0

Value 1

X	X	0
	X	X
X	0	0

Min value
0

X	X	0
0	X	X
X	0	0

Value 0

Tree C

X	0	X
		0
	0	X

Tree x
Min value
1

X	0	X
X		0
	0	X

Min value
-1

X	0	X
	X	0
	0	X

Value 1

X	0	X
X		0
	0	X

Min value
1

X	0	X
	X	0
	0	X

Value 1

X	0	X
X	0	0
	0	X

Value -1

X	0	X
X	X	0
	0	X

Value 1

Tree x

X	0	X
	X	0
X	0	X

Value 1

X	0	X
X		0
X	0	X

Value 1

Jogo D

X	O	
O	X	
		X

1

Segunda o
minuendo

1

1	1	1	1
1	1	1	1
0	1	2	1

Banco Competitivo

-1 vitória O 0 empate 1 vitória X

Jogador X

Maxvalue

1

X		O
	O	O
X		X

-1

X	X	O
	O	O
X		X

X		O
X	O	O
X		X

Value 1

X		O
	O	O
X	X	X

Value 1

Minvalue

Jogador O

X	X	O
O	O	O
X		X

Value -1

X	X	O
	O	O
X	O	X

Jogador X

Maxvalue 1

X	X	O
X	O	O
X	O	X

Value 1

Δ - максимизатор
 ∇ - минимизатор

