

Timus #1197 [answers]

8	2	3	4	4	4	4	3	2
7	3	4	6	6	6	6	4	3
6	4	6	8	8	8	8	6	4
5	4	6	8	8	8	8	6	4
4	4	6	8	8	8	8	6	4
3	4	6	8	8	8	8	6	4
2	3	4	6	6	6	6	4	3
1	2	3	4	4	4	4	3	2
	A	B	C	D	E	F	G	H

Timus #1197 [distance]

4	9	4	1	0
3	10	5	2	1
2	13	8	5	4
1	18	13	10	9
	A	B	C	D

Timus #1319

$$f(A) := \text{submatrix}(A, 0, \text{rows}(A) - 1, 0, \text{cols}(A) - 2) - \text{submatrix}(A, 0, \text{rows}(A) - 1, 1, \text{cols}(A) - 1)$$

$$g(A) := \text{submatrix}(A, 1, \text{rows}(A) - 1, 0, \text{cols}(A) - 1) - \text{submatrix}(A, 0, \text{rows}(A) - 2, 0, \text{cols}(A) - 1)$$

$$A := \begin{bmatrix} 4 & 2 & 1 \\ 7 & 5 & 3 \\ 9 & 8 & 6 \end{bmatrix}$$

$$f(A) = \begin{bmatrix} 2 & 1 \\ 2 & 2 \\ 1 & 2 \end{bmatrix}$$

$$g(A) = \begin{bmatrix} 3 & 3 & 2 \\ 2 & 3 & 3 \end{bmatrix}$$

$$g(A)^{\langle 0 \rangle} = \begin{bmatrix} 3 \\ 2 \end{bmatrix}$$

$$B := \begin{bmatrix} 7 & 4 & 2 & 1 \\ 11 & 8 & 5 & 3 \\ 14 & 12 & 9 & 6 \\ 16 & 15 & 13 & 10 \end{bmatrix}$$

$$f(B) = \begin{bmatrix} 3 & 2 & 1 \\ 3 & 3 & 2 \\ 2 & 3 & 3 \\ 1 & 2 & 3 \end{bmatrix}$$

$$g(B) = \begin{bmatrix} 4 & 4 & 3 & 2 \\ 3 & 4 & 4 & 3 \\ 2 & 3 & 4 & 4 \end{bmatrix}$$

$$g(B)^{\langle 0 \rangle} = \begin{bmatrix} 4 \\ 3 \\ 2 \end{bmatrix}$$

$$C := \begin{bmatrix} 11 & 7 & 4 & 2 & 1 \\ 16 & 12 & 8 & 5 & 3 \\ 20 & 17 & 13 & 9 & 6 \\ 23 & 21 & 18 & 14 & 10 \\ 25 & 24 & 22 & 19 & 15 \end{bmatrix}$$

$$f(C) = \begin{bmatrix} 4 & 3 & 2 & 1 \\ 4 & 4 & 3 & 2 \\ 3 & 4 & 4 & 3 \\ 2 & 3 & 4 & 4 \\ 1 & 2 & 3 & 4 \end{bmatrix}$$

$$g(C) = \begin{bmatrix} 5 & 5 & 4 & 3 & 2 \\ 4 & 5 & 5 & 4 & 3 \\ 3 & 4 & 5 & 5 & 4 \\ 2 & 3 & 4 & 5 & 5 \end{bmatrix}$$

$$g(C)^{\langle 0 \rangle} = \begin{bmatrix} 5 \\ 4 \\ 3 \\ 2 \end{bmatrix}$$