Reporte de operaciones con S.E.L

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Análisis numérico

Método iterativo de Jacobi

Resolución del sistema de ecuaciones lineales A

$$= 0$$
$$= 0$$

$$\mathbf{A} = \begin{bmatrix} 0 & 0 \\ 0 & 0 \end{bmatrix}$$

Fórmula del proceso iterativo:

$$\mathbf{X}^{(k)} = \mathbf{T}\mathbf{X}^{(k-1)} + \mathbf{C} \quad \forall\, k \geq 1$$

Condiciones iniciales de proceso:

$$\mathbf{T} = \begin{bmatrix} 0 & -nan(ind) \\ -nan(ind) & 0 \end{bmatrix} \quad \mathbf{C} = \begin{bmatrix} -nan(ind) \\ -nan(ind) \end{bmatrix} \quad \mathbf{X}^{(0)} = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$$

Resultados de apoximaciones del la solución $\mathbf{X} \approx \mathbf{X}^{(k)}$

k	1	2	3	4	5	6	7
$a_0^{(k)}$	0	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	0	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	8	9	10	11	12	13	14
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	15	16	17	18	19	20	21
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	22	23	24	25	26	27	28
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	29	30	31	32	33	34	35
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	36	37	38	39	40	41	42
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	43	44	45	46	47	48	49
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	50	51	52	53	54	55	56
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	57	58	59	60	61	62	63
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	64	65	66	67	68	69	70
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	71	72	73	74	75	76	77
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	78	79	80	81	82	83	84
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	85	86	87	88	89	90	91
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	92	93	94	95	96	97	98
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)	-nan(ind)

k	99	100	101
$a_0^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)
$a_1^{(k)}$	-nan(ind)	-nan(ind)	-nan(ind)