

Sustitución hacia delante

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Matriz de coeficientes triangular inferior

$$A_{1,1}x_1 = b_1$$

$$A_{2,1}x_1 + A_{2,2}x_2 = b_2$$

$$A_{3,1}x_1 + A_{3,2}x_2 + A_{3,3}x_3 = b_3$$

$$A_{4,1}x_1 + A_{4,2}x_2 + A_{4,3}x_3 + A_{4,4}x_4 = b_4$$

$$x_1 = \frac{b_1}{A_{1,1}}$$

$$x_2 = \frac{b_2 - A_{2,1}x_1}{A_{2,2}}$$

$$x_3 = \frac{b_3 - (A_{3,1}x_1 + A_{3,2}x_2)}{A_{3,3}}$$

$$x_4 = \frac{b_4 - (A_{4,1}x_1 + A_{4,2}x_2 + A_{4,3}x_3)}{A_{4,4}}$$

$$x_2 = \frac{b_2 - A_{2,1}x_1}{A_{2,2}}$$

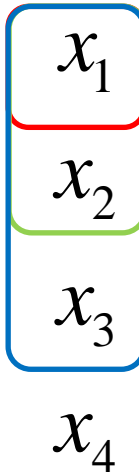
$$A(2,1)*x(1,1)$$

$$x_3 = \frac{b_3 - (A_{3,1}x_1 + A_{3,2}x_2)}{A_{3,3}}$$

$$A(3,1:2)*x(1:2,1)$$

$$x_4 = \frac{b_4 - (A_{4,1}x_1 + A_{4,2}x_2 + A_{4,3}x_3)}{A_{4,4}}$$

$$A(4,1:3)*x(1:3,1)$$



$A_{1,1}$	0	0	0
$A_{2,1}$	$A_{2,2}$	0	0
$A_{3,1}$	$A_{3,2}$	$A_{3,3}$	0
$A_{4,1}$	$A_{4,2}$	$A_{4,3}$	$A_{4,4}$

$$x(1,1) = b(1)/A(1,1)$$

$$x(2,1) = (b(2) - A(2,1) * x(1,1)) / A(2,2)$$

$$x(3,1) = (b(3) - A(3,1:2) * x(1:2,1)) / A(3,3)$$

$$x(4,1) = (b(4) - A(4,1:3) * x(1:3,1)) / A(4,4)$$

$$x(1,1) = b(1)/A(1,1)$$

for i =

$$x(i,1) = (b(i) - A(i,1:i-1) * x(1:i-1,1)) / A(i,i)$$

end

$$x(1,1)=b(1)/A(1,1)$$

for i=2:4

$$x(i,1)=(b(i)-A(i,1:i-1)*x(1:i-1,1))/A(i,i)$$

end

$$x(1,1)=b(1)/A(1,1)$$

for i=2:n

$$x(i,1)=(b(i)-A(i,1:i-1)*x(1:i-1,1))/A(i,i)$$

end