

$$x_n = \frac{1}{U_{nn}} \left(b_n - U_{n, n+1:N} \cdot x_{n+1:N} \right),$$

$$x_{n+1:N} = \{x_2, x_3, \dots, x_N\},$$

$$n = 1, 2, \dots, N$$

1
$$x_1 = \frac{1}{U_{11}} \left(b_1 - \underbrace{U_{1,2:N}}_{\left\{ \underbrace{U_{1,2}, U_{1,3}}_{\{x_2, x_3\}} \right\}} \cdot \underbrace{x_{2:N}}_{x_2, x_3} \right)$$

2
$$x_2 = \frac{1}{U_{22}} \left(b_2 - U_{2,3} \cdot x_3 \right)$$