

LUP-SOLVE( $L, U, \pi, b, n$ )

1    let  $x$  and  $y$  be new vectors of length  $n$

2    **for**  $i = 1$  **to**  $n$

3         $y_i = b_{\pi[i]} - \sum_{j=1}^{i-1} l_{ij} y_j$

4    **for**  $i = n$  **downto**  $1$

5         $x_i = (y_i - \sum_{j=i+1}^n u_{ij} x_j) / u_{ii}$

6    **return**  $x$