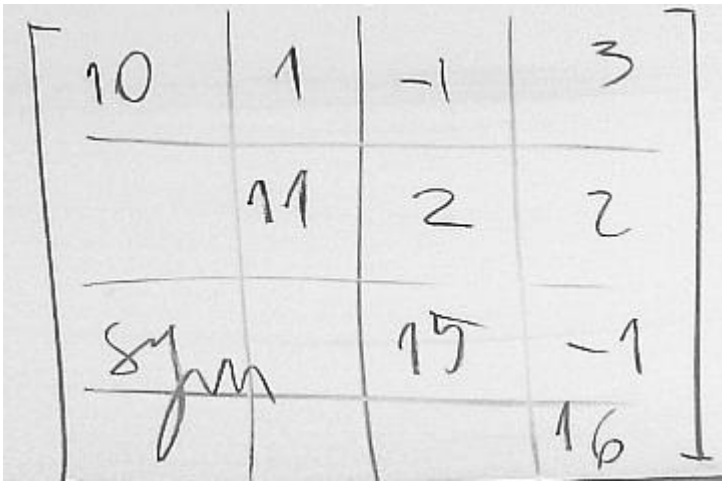
Metoda Banachiewicza-Cholesky'ego

ORIGIN := 1

Grupa 2



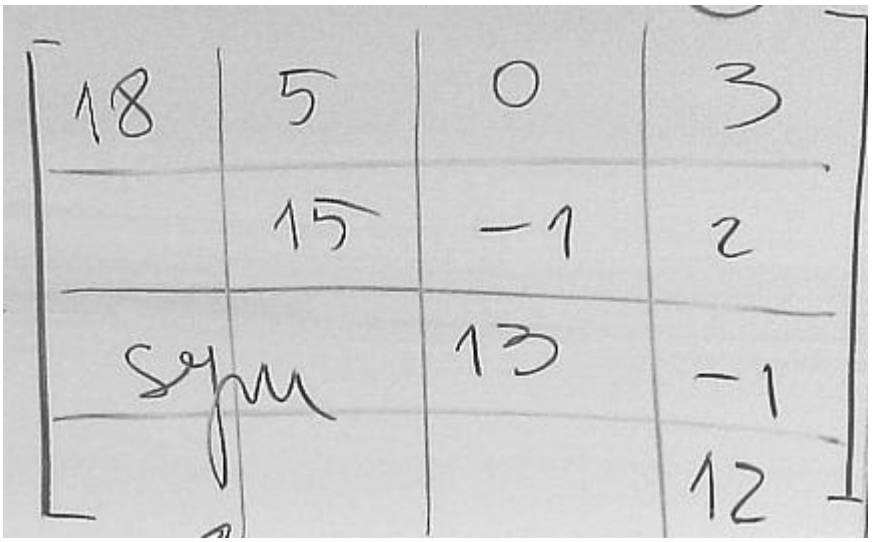
$$A := \begin{pmatrix} 10 & 1 & -1 & 3 \\ 1 & 11 & 2 & 2 \\ -1 & 2 & 15 & -1 \\ 3 & 2 & -1 & 16 \end{pmatrix} \qquad L := \text{cholesky}(A)$$

$$L_{i,i} = \sqrt{A_{i,i} - \sum_{k=1}^{i-1} \left(L_{i,k}\right)^2} \qquad L_{i,j} = \left[A_{i,j} - \sum_{k=1}^{j-1} \left(L_{i,k} \cdot L_{j,k}\right)\right] \cdot \frac{1}{L_{j,j}} \qquad j < i$$

$L =$

	1	2	3	4
1	3.162	0	0	0
2	0.316	3.302	0	0
3	-0.316	0.636	3.807	0
4	0.949	0.515	-0.27	3.842

Grupa 1



$$A := \begin{pmatrix} 18 & 5 & 0 & 3 \\ 5 & 15 & -1 & 2 \\ 0 & -1 & 13 & -1 \\ 3 & 2 & -1 & 12 \end{pmatrix} \qquad L := \text{cholesky}(A)$$

$$L_{i,i} = \sqrt{A_{i,i} - \sum_{k=1}^{i-1} \left(L_{i,k}\right)^2} \qquad L_{i,j} = \left[A_{i,j} - \sum_{k=1}^{j-1} \left(L_{i,k} \cdot L_{j,k}\right)\right] \cdot \frac{1}{L_{j,j}} \quad j < i$$

$L =$

	1	2	3	4
1	4.243	0	0	0
2	1.179	3.689	0	0
3	0	-0.271	3.595	0
4	0.707	0.316	-0.254	3.367