

Starting with $x_1^{(1)} \in \mathbb{R}^n$ and $i = 1$ we iterate for $1 \leq j \leq n - 1$

$$x_{j+1}^{(i)} = x_j^{(i)} + \tau_j^{(i)} e_j \quad (1)$$

where $\tau_j^{(i)}$ solves the problem

$$\min_{\tau} f(x_j^{(i)} + \tau e_j) \quad (2)$$

Then we set $x_1^{(i+1)} := x_n^{(i)}$ and repeat from (1) but with $i+1$. In each step (2) is solved by a line search applied on the function $\tau \mapsto f(x_j^{(i)} + \tau e_j)$.