Updated value $x = x^{\text{low}} + yd$ .

$$\begin{array}{lcl} \text{Minimize} & f(\boldsymbol{x}) & \\ \text{Subject to} & g_i(\boldsymbol{x}) \leq 0; & i = 1, \ldots, m \\ & h_k(\boldsymbol{x}) = 0; & k = 1, \ldots, p \\ & x_j \geq 0; & j = 1, \ldots, n \end{array}$$