$$\boldsymbol{x}^* = \arg\min f(\boldsymbol{x}) + g(\boldsymbol{x})$$
$$g(\boldsymbol{x}) - g(\boldsymbol{x}^*) + \nabla f(\boldsymbol{x}^*)^\Gamma (\boldsymbol{x} - \boldsymbol{x}^*) \geqslant 0, \quad \forall \boldsymbol{x} \in \mathbb{R}^n$$