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This is a three-variable quadratic bilevel programming problem from [1, Chapter 7, example 7.2.2, page 281]. It has a solution at $(x_1, x_2, y) = (1, 0.4, 0.8)$.

$$
\begin{aligned}
\underset{x_1,x_2,y}{\text{minimise}} \quad & \frac{1}{2}(x_1-1)^2 + \frac{1}{2}\left(x_2 - \frac{2}{5}\right)^2 + \frac{1}{2}\left(y - \frac{4}{5}\right)^2 \\
\text{subject to} \quad & 0 \le x_1 \le 1, \\
& 0 \le x_2 \le 1, \\
& y \in \arg\min_{y} \begin{cases} \frac{1}{2}y^2 + y - x_1 y + 3x_2 y, \\ \text{subject to} \quad 0 \le y \le 1. \end{cases}
\end{aligned}
$$

			Dimension	Type
Upper-level	x	variables	2	real
	F(x,y)	objective	1	quadratic
	G(x,y)	inequality	4	bounds
	H(x,y)	equality	0	none
Lower-level	y	variables	1	real
	f(x,y)	objective	1	quadratic
	g(x,y)	inequality	2	bounds
	h(x,y)	equality	0	none

References

[1] Jonathan Bard. *Practical Bilevel Optimization: Algorithms And Applications*, volume 30. Springer Science & Business Media, 09 1998.