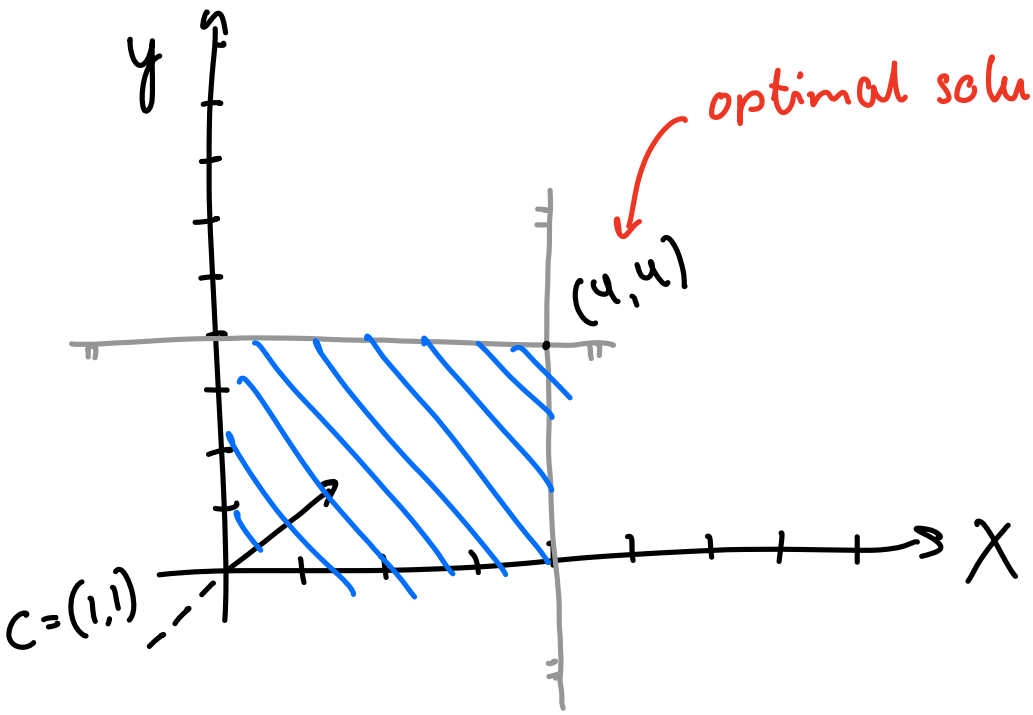

$$\max.\ \mathcal{G} = x + y$$

$$x \leq 4$$

$$y \leq 4$$

$$x, y \geq 0$$

$$w_1 = 4 - x$$

$$w_2 = 4 - y$$

if $x > 0$ (and $y = 0$):

$$w_1 = 4 - x \Rightarrow 4 \geq x$$

$$\min\{4\} = 4$$

swap w_1 for x

w_1: new NBV

x: new BV

$$\varphi = (4 - w_1) + y$$

$$x = 4 - w_1$$

$$w_2 = 4 - y$$

$x = 4$	$w_1 = 0$
$w_2 = 4$	$y = 0$
BV	NBV

$$(x, y, w_1, w_2) = (4, 0, 0, 4)$$

if $y > 0$ (and $x = 0$):

$$w_2 = 4 - y \Rightarrow 4 \geq y$$

$\min\{4\} = 4$

Swap w_2 for y

new NBV

new BV

$$\begin{aligned} g &= (4 - w_1) + (4 - w_2) \\ &= 8 - w_1 - w_2 \end{aligned}$$

$x = 4 - w_1$

$y = 4 - w_2$

$x = 4 \quad w_1 = 0$

$y = 4 \quad w_2 = 0$

BV NBV ✓

$$\hat{x} = \begin{pmatrix} 4 \\ 4 \end{pmatrix}, \quad c^T \hat{x} = 1 \cdot 4 + 1 \cdot 4 = 8$$

Full solution!