$$a = \begin{bmatrix} 1 & 2 \\ b = \begin{bmatrix} 10, 100 \end{bmatrix} \\ S = \begin{bmatrix} a, b \end{bmatrix} \\ C = \begin{bmatrix} a, b \end{bmatrix}$$

$$out = 11$$

$$a = 1 \\ b = 100$$

$$a = 2 \\ b = 10$$

$$b = 100$$

$$out = 12$$

$$out = 102$$

$$out = 102$$