

P1. Write a function `calcDet` that calculates the determinant of a 2x2 matrix. The `calcDet` function needs to accept the 2x2 matrix and return the determinant of the given matrix. You may assume that 2x2 matrix always given to `calcDet` function.

$$|A| = \begin{bmatrix} a & b \\ c & d \end{bmatrix} = ad - bc$$

P2. Write a program that calculates the inverse of the given matrix. Your program should have at least three functions, `main`, `calcDet`, and `inverse`. You can use the `calcDet` from P1. The `inverse` function needs to accept the 2x2 matrix and return the inverse of the given matrix. You may assume that 2x2 matrix always given to `inverse` function.

$$A^{-1} = \frac{1}{|A|} = \begin{bmatrix} d & -b \\ -c & a \end{bmatrix}$$