

## # Product requirement document

### # Title

2D matrix calculator

### # Background and motivation

Matrix calculation is a very common application, including common matrix addition, matrix subtraction, matrix multiplication, matrix transpose, matrix inversion, matrix determinant, solving linear equations, etc. In matrix computing, 2D matrices are the most common. Therefore, we hope to design a software that can easily perform calculations related to 2D matrices.

### # Key functions

- matrix addition
- matrix subtraction
- matrix multiplication
- matrix transpose
- matrix inversion
- matrix determinant
- solving linear equations

### # Algorithm methods

We use the relevant functions provided in the numpy library, and use some matrix-related algebraic knowledge to write the code.

### # Similar Products

Symbolab, wormalpha