Matrix-Matrix Multiplication

We multiply two matrices by breaking it into several vector multiplications and concatenating the result.

$$\begin{bmatrix} a & c & e \\ b & d & f \end{bmatrix} * \begin{bmatrix} w & y \\ x & z \end{bmatrix} = \begin{bmatrix} a*w+b*y & c*w+d*y & e*w+f*y \\ a*x+b*z & c*x+d*z & e*x+f*z \end{bmatrix}$$

An **m x n matrix** multiplied by an **n x o matrix** results in an **m x o** matrix. In the above example, a 3 x 2 matrix times a 2 x 2 matrix resulted in a 3 x 2 matrix.

To multiply two matrices, the number of **columns** of the first matrix must equal the number of **rows** of the second matrix.

For example:

```
% Initialize a 3 by 2 matrix
A = [1, 2; 3, 4;5, 6]
% Initialize a 2 by 1 matrix
B = [1; 2]
% We expect a resulting matrix of (3 by 2)*(2 by 1) = (3 by 1)
mult_AB = A*B
% Make sure you understand why we got that result
```

运行重置