**Matrix Multiplication of 3x3 Matrices in EASy68K and RISC-V Assembly Without Loops**

**Objective:**

To implement matrix multiplication of 3x3 matrices in both EASy68K and RISC-V assembly languages without utilizing loops.

**Description:**

This project involves creating two separate programs to perform matrix multiplication of 3x3 matrices. The multiplication will be implemented without using loops, which means each element of the resulting matrix will be calculated explicitly.

**Steps:**

1. **Define the Matrices**:
   * Define two 3x3 matrices, A and B, with predefined values.
   * Define the resulting matrix C, which will store the product of matrices A and B.
2. **Manual Matrix Multiplication Calculation**:
   * For each element in the resulting matrix C, manually compute the sum of the element-wise multiplication of the corresponding row from matrix A and column from matrix B.
3. **EASy68K Implementation**:
   * Write an EASy68K assembly program to perform the matrix multiplication.
   * Use direct addressing to access each element of matrices A and B.
   * Store the results in matrix C.
4. **RISC-V Implementation**:
   * Write a RISC-V assembly program to perform the matrix multiplication.
   * Use direct addressing to access each element of matrices A and B.
   * Store the results in matrix C.

**Example:**

Given the following matrices:

**Matrix A**:

2 1 3

3 4 1

5 2 3

**Matrix B**:

1 2 0

4 1 2

3 2 1

**Matrix C** (Result of A \* B):

2\*1 + 1\*4 + 3\*3 2\*2 + 1\*1 + 3\*2 2\*0 + 1\*2 + 3\*1

3\*1 + 4\*4 + 1\*3 3\*2 + 4\*1 + 1\*2 3\*0 + 4\*2 + 1\*1

5\*1 + 2\*4 + 3\*3 5\*2 + 2\*1 + 3\*2 5\*0 + 2\*2 + 3\*1

**Deliverables:**

1. **EASy68K Program**:
   * Source code file (.X68) with comments explaining each step.
   * Screenshot of the program output.
2. **RISC-V Program**:
   * Source code file (.S) with comments explaining each step.
   * Screenshot of the program output.

**Tools:**

* **EASy68K**: An assembler for the Motorola 68000 microprocessor.
* **RISC-V Simulator**: A simulator for running RISC-V assembly code.

**Evaluation:**

* Correctness of the matrix multiplication operation.
* Proper use of assembly language features.
* Clarity and readability of the code with appropriate comments.