

Write a C program to perform Matrix Multiplication

```
#include <stdio.h>
```

```
#define ROW1 2
```

```
#define COL1 2
```

```
#define ROW2 2
```

```
#define COL2 2
```

```
int main() {
```

```
    int matrix1[ROW1][COL1] = {{1, 2}, {3, 4}};
```

```
    int matrix2[ROW2][COL2] = {{1, 0}, {0, 1}};
```

```
    int result[ROW1][COL2];
```

```
    for (int i = 0; i < ROW1; i++) {
```

```
        for (int j = 0; j < COL2; j++) {
```

```
            result[i][j] = 0;
```

```
            for (int k = 0; k < COL1; k++) {
```

```
                result[i][j] += matrix1[i][k] * matrix2[k][j];
```

```
            }
```

```
        }
```

```
    }
```

```
    printf("Result of Matrix Multiplication:\n");
```

```
    for (int i = 0; i < ROW1; i++) {
```

```
        for (int j = 0; j < COL2; j++) {
```

```
            printf("%d ", result[i][j]);
```

```
        }
```

```
        printf("\n");
```

```
    }
```

```
    return 0;
```

```
}
```