

## Exercise 3-6: Matrix calculation for multidimensional arrays matrix\_multiple.c

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- Create a program `matrix_multiple.c` that finds the product `C` of the 4-by-3 matrix `A` and the 3-by-4 matrix `B`.
- $C = A \times B$

$$A = \begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 1 & 2 & 3 \\ 4 & 5 & 6 \end{pmatrix}$$

$$B = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 5 & 6 & 7 & 8 \\ 1 & 2 & 3 & 4 \end{pmatrix}$$

The matrix values have already been entered in the sample source `matrix_multiple.c`, so please use it.

### points:

1. Be aware of which is the row and which is the column when coding  
`int A[4][3]`  
row column
2. Matrix subscripts start at 0

<example>

```
$ ./matrix_multiple
C[0][0] = 14
C[0][1] = 20
C[0][2] = 26
C[0][3] = 32
C[1][0] = 35
C[1][1] = 50
C[1][2] = 65
C[1][3] = 80
C[2][0] = 14
C[2][1] = 20
C[2][2] = 26
C[2][3] = 32
C[3][0] = 35
C[3][1] = 50
C[3][2] = 65
C[3][3] = 80
```

```
$ ./matrix_multiple
C =
| 14  20  26  32|
| 35  50  65  80|
| 14  20  26  32|
| 35  50  65  80|
```