

# Assignment 2

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Download all python codes from

<https://github.com/srikan-p/EE3900/tree/main/Assignment2/codes>

Download all latex codes from

<https://github.com/srikan-p/EE3900/tree/main/Assignment2>

## PROBLEM

(Matrix Q.2.45) Find  $AB$ , if  $A = \begin{pmatrix} 6 & 9 \\ 2 & 3 \end{pmatrix}$  and  $B = \begin{pmatrix} 2 & 6 & 0 \\ 7 & 9 & 8 \end{pmatrix}$ .

## SOLUTION

Using matrix multiplication,

$$AB = \begin{pmatrix} 6 & 9 \\ 2 & 3 \end{pmatrix} \begin{pmatrix} 2 & 6 & 0 \\ 7 & 9 & 8 \end{pmatrix} \quad (0.0.1)$$

$$= \begin{pmatrix} 12 + 63 & 36 + 81 & 0 + 72 \\ 4 + 21 & 12 + 27 & 0 + 24 \end{pmatrix} \quad (0.0.2)$$

$$= \begin{pmatrix} 75 & 117 & 72 \\ 25 & 39 & 24 \end{pmatrix} \quad (0.0.3)$$