Session 1

2023.12.04

Typically, Data are stored/represented as matrices.

e.g.

row

Data Point /observation

Column/Variable

Id	Finance Score	BA Score
1	80	90
2	81	85
3	75	93
4	85	84

4×3

$$\begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}_{2 \times 2} \begin{pmatrix} 1 & -1 \\ -1 & 1 \end{pmatrix}_{2 \times 2} = \begin{pmatrix} 1 \times 1 + 2 \times (-1) & \\ & \end{pmatrix}_{2 \times 2}$$

$$\begin{pmatrix} 1 & -1 \\ -1 & 1 \end{pmatrix} \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix} =$$

$AB \neq BA$ Even if dimension matches