



Intention:

Higher Attention Score = Higher Similarity

“Mouse” ----- “Hand”

$$\begin{pmatrix} 5 \\ 10 \end{pmatrix} \cdot \begin{pmatrix} 5 \\ 5 \end{pmatrix} = (5 \times 5) + (5 \times 10) = 75$$

Relationship Between “Mouse” and “Hand”
Attention Score = 75

BUT

“Mouse” ----- “Mouse”

$$\begin{pmatrix} 5 \\ 5 \end{pmatrix} \cdot \begin{pmatrix} 5 \\ 5 \end{pmatrix} = (5 \times 5) + (5 \times 5) = 50$$

Relationship Between “Mouse” and “Hand”
Attention Score = 50

This is like raw data, we need to normalize to handle outliers and anomalies to prevent issues like this.