

User Classification

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Data

U1: p1, p3, p7	A
U2: p2, p4, p5, p6, p3, p7	H
U3: p1, p3, p6, p10	A
U4: p3, p9	A
U5: p4, p5, p7, p8, p10	H
U6: p1, p3, p9, p10	H

Calculate Distance

$$dis(x_i, x_j) = \frac{p - m}{p}$$

Predict Class Of The New Sample

$$Ux = P4, P7, P10$$

$$dis(Ux, U1) = 0.9$$

$$dis(Ux, U2) = 0.8$$

$$dis(Ux, U3) = 0.9$$

$$dis(Ux, U4) = 1$$

$$dis(Ux, U5) = 0.7$$

$$dis(Ux, U6) = 0.9$$

Method KNN, K = 3

Sort the results:

$$\textit{dis}(Ux, U5) = 0.7 \quad \text{H}$$

$$\textit{dis}(Ux, U2) = 0.8 \quad \text{H}$$

$$\textit{dis}(Ux, U1) = 0.9 \quad \text{A}$$

$$\textit{dis}(Ux, U6) = 0.9$$

$$\textit{dis}(Ux, U3) = 0.9$$

$$\textit{dis}(Ux, U4) = 1$$

predicted class: **H (Human)**

The End