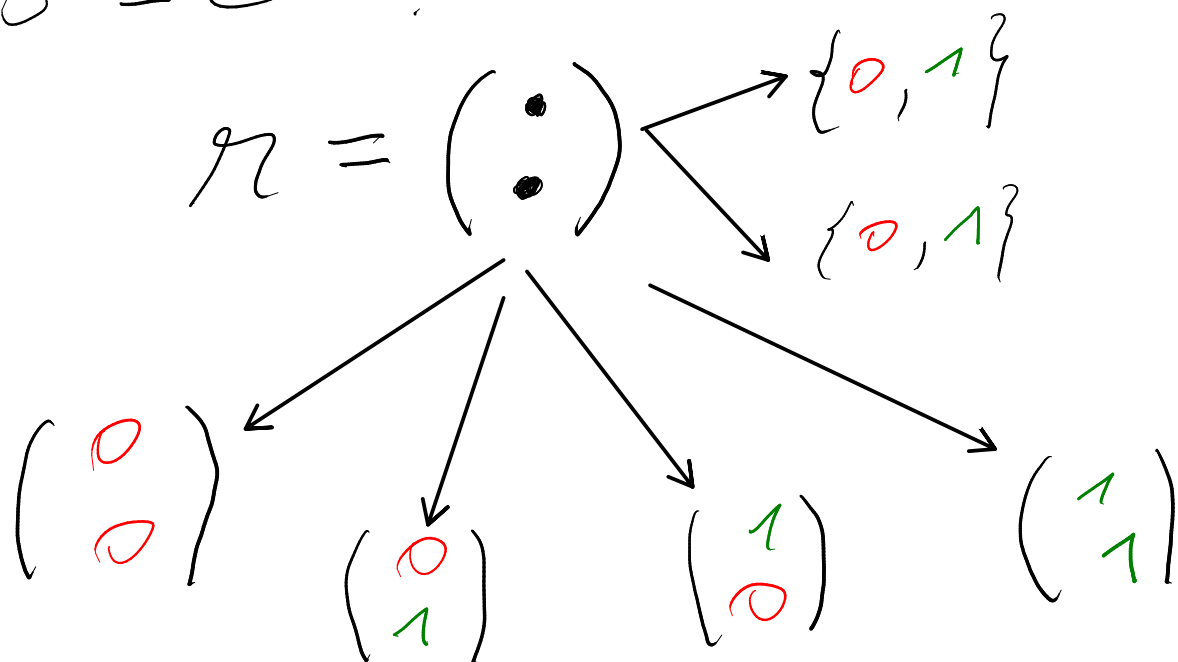


$$AB = C ?$$



EXAMPLE

$$AB \vec{r} - C \vec{r} = 0 \begin{cases} P = 100\% \\ AB = C \\ P \leq \frac{1}{2} \\ AB \neq C \end{cases}$$

$$\vec{P} = A \times (B \vec{r}) - C \vec{r}$$

$$= (A \times B - C) \vec{r}$$

$$\begin{pmatrix} \quad \end{pmatrix} \begin{pmatrix} \quad \end{pmatrix} - \begin{pmatrix} \quad \end{pmatrix} = \begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$$

$$A \times B \neq C$$

$$\vec{D} = D \times \vec{r}, \quad D = A \times B - C$$

$$= (\sigma_{ij})$$

$$A \times B \neq C \Rightarrow \exists \sigma_{ij} \in D, \sigma_{ij} \neq 0$$

$$D = \begin{pmatrix} \end{pmatrix} \begin{pmatrix} \end{pmatrix} - \begin{pmatrix} \end{pmatrix} = \begin{pmatrix} \end{pmatrix}$$

$$\begin{array}{c|c} D = A & \\ \hline D = 0 & D = C^{\frac{1}{2}} \end{array}$$



$$p_i \in P \quad \exists \quad \begin{pmatrix} - & - & - \\ - & - & - \end{pmatrix} \begin{pmatrix} - \\ - \\ - \end{pmatrix} = \begin{pmatrix} - \\ - \\ - \end{pmatrix}$$

$$p_i = \sum_{k=1}^n \sigma_{ik} r_k$$

$$= \sigma_{ij} r_j + y$$

$$Pr(p_i \neq 0) = Pr(p_i = 0 \wedge y = 0) \vee (p_i \neq 0 \wedge y \neq 0)$$

$$= Pr(p_i = 0 \wedge y = 0) P(y = 0) + Pr(p_i \neq 0 \wedge y \neq 0) Pr(y \neq 0)$$

$$P_{\mathcal{H}}(p_i=0 \mid y=0) = P_{\mathcal{H}}(r_j=0) = \frac{1}{2}$$

$$P_{\mathcal{H}}(p_i=0 \mid y \neq 0) = \frac{1}{2}$$

$$- P(r_j=1 \mid \underline{r_j=-y}) \leq P(r_j=1) = \frac{1}{2}$$

$$P(p_i=0) \leq \frac{1}{2} P[y=0] + \frac{1}{2} P[y \neq 0]$$

$$(=) (=) \frac{1}{2} k n^2 + k n^2 + k n^2 = \Theta(n^2)$$

+ B A I E S

$$+ \cos \tau$$

I. Intro. - L_2

II. Presentation \swarrow Ale (script slides)
 \searrow L_2 (visual)

III. Example - Ale

IV. $P \leq \frac{1}{2}$ (Dem.) - L_2

V. Bayes (Dem.) - Ale

* Visual - mix intro L_2 & Ale

VI Implementation