Assignment – 3

- Generate a linear system model for any classification/domain.

① Election Prediction System :-

Voters – Take Money ⟶

Voters – Wants Change ⟶

Voters – Don't want to vote ⟶ [Election Result Prediction System] ⟶ Previous Ruling Party (PP)

Voters – Random Voting ⟶ ⟶ New Ruling (NP) Party

Voters – Hereditary Party Support ⟶ ⟶ No Majority (NM)
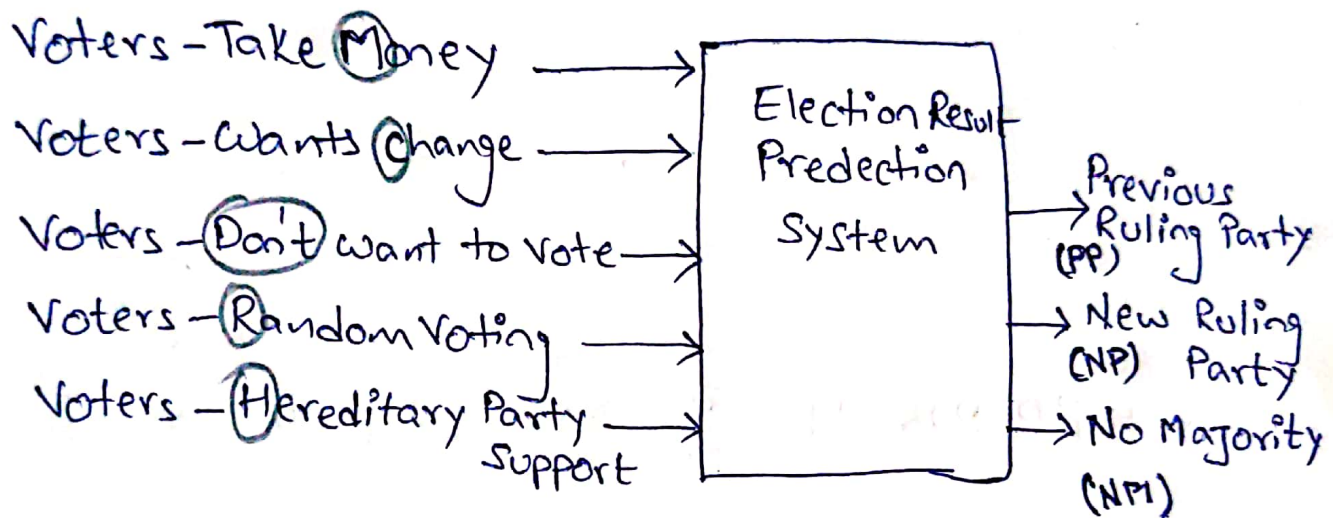
$$PP = a_1 M + a_2 C + a_3 DN + a_4 R + a_5 H$$

$$NP = b_1 M + b_2 C + b_3 DN + b_4 R + b_5 H$$

$$NM = c_1 M + c_2 C + c_3 DN + c_4 R + c_5 H$$

$$\Rightarrow \begin{bmatrix} a_1 & a_2 & a_3 & a_4 & a_5 \\ b_1 & b_2 & b_3 & b_4 & b_5 \\ c_1 & c_2 & c_3 & c_4 & c_5 \end{bmatrix} \begin{bmatrix} M \\ C \\ DN \\ R \\ H \end{bmatrix} = \begin{bmatrix} PP \\ NP \\ NM \end{bmatrix}$$

$$A X = B$$