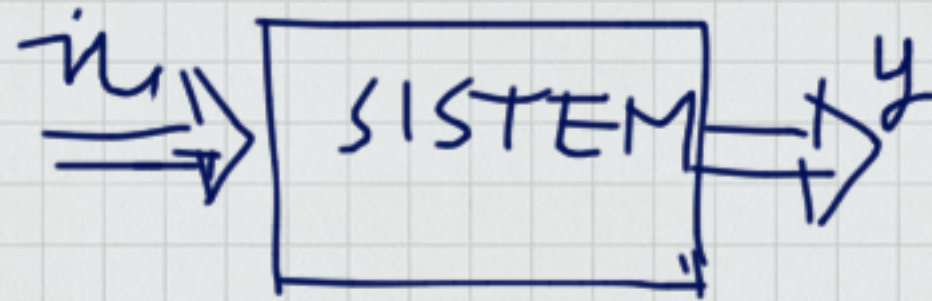


Model Ruang Keadaan



$$u = \text{vektor} [m \times 1]$$

$$\begin{bmatrix} u_1(t) \\ u_2(t) \\ \vdots \\ u_m(t) \end{bmatrix} \quad m \geq 1$$

$$y = \text{vektor} [k \times 1]$$

$$\begin{bmatrix} y_1(t) \\ y_2(t) \\ \vdots \\ y_k(t) \end{bmatrix}$$

Model:

Pers. Keadaan
(State Equation)

Pers. Keluaran
(Output Equation)

$$\begin{cases} \dot{x} = Ax + Bu \\ y = Cx + Du \end{cases}$$

$x \equiv$ peubah keadaan = vektor $[n \times 1]$
(state variables)

$$\dot{x} = \frac{dx}{dt} = \begin{bmatrix} dx_1(t)/dt \\ dx_2(t)/dt \\ \vdots \\ dx_n(t)/dt \end{bmatrix} \quad \begin{bmatrix} x_1(t) \\ x_2(t) \\ \vdots \\ x_n(t) \end{bmatrix}$$

n-dynamics