

$$\boxed{\frac{a}{b} = \frac{2}{3}} \rightarrow \left[\begin{array}{l} \text{Jika } a=2 \\ \text{maka } b=3 \end{array} \right] \left[\begin{array}{l} \text{Jika } a=4 \\ \text{maka } b=6 \end{array} \right]$$

peubah
is-7aror
↓

$$\left[\begin{array}{l} \text{Jika (I)} \\ \text{maka (II)} \end{array} \right] Y(s) = [b_m s^m + b_{m-1} s^{m-1} + b_{m-2} s^{m-2} + \dots + b_1 s + b_0] X(s)$$

$$U(s) = [a_n s^n + a_{n-1} s^{n-1} + a_{n-2} s^{n-2} + \dots + a_1 s + a_0] X(s)$$

Part (II):

$$U(s) = a_n s^n X(s) + a_{n-1} s^{n-1} X(s) + a_{n-2} s^{n-2} X(s) + \dots$$

Inverse Laplace Transform:

$$u = a_n \frac{d^n x(t)}{dt^n} + a_{n-1} \frac{d^{n-1} x(t)}{dt^{n-1}} + a_{n-2} \frac{d^{n-2} x(t)}{dt^{n-2}} + \dots$$

$$\int_0^{t-1} X(s) = x(t) \quad \int_0^{t-1} U(s) = u$$

$$\mathcal{L}^{-1} X(s) = x(t) \quad \mathcal{L}^{-1} Y(s) = y$$

$$+ a_1 \frac{dx(t)}{dt} + a_0 x(t)$$