

$$x_0 = \text{dyn}(u_0, \text{start})$$

$$x_1 = \text{dyn}(u_1, x_0)$$

$$x_2 = \text{dyn}(u_2, x_1)$$

$$\dots = \dots$$

$$x_k = \text{dyn}(u_k, x_{k-1})$$