

Tarea 2 PDS

Convención

Para $n=0$

$$y(0) = h(0)x(0)$$

$$y(0) = 1(0.7) = 0.7$$

Para $n=1$

$$y(1) = h(0)x(0) + h(1)x(1)$$

$$y(1) = (0.8)(0.7) + (1)(1) = 1.35$$

Para $n=2$

$$y(2) = h(0)x(0) + h(1)x(1) + h(2)x(2)$$

$$y(2) = (0.7)(0.2) + 1(1.3) + 1.5(0.5) = 2.91$$

Para $n=3$

$$y(3) = h(0)x(0) + h(1)x(1) + h(2)x(2) + h(3)x(3)$$

$$y(3) = (0.7)(0.2) + 1.3(1) + 0.5(1.5) + (1)(2) = 4.19$$

Para $n=4$

$$y(4) = h(0)x(0) + h(1)x(1) + h(2)x(2) + h(3)x(3) + h(4)x(4)$$

$$y(4) = (0.7)(0.7) + (1)(0.2) + (1.5)(1.3) + 2(0.5) + 1(0.4) = 4.04$$

Para $n=5$

$$y(5) = h(0)x(0) + h(1)x(1) + h(2)x(2) + h(3)x(3) + h(4)x(4) + h(5)x(5)$$

$$y(5) = (0.7)(1.2) + 1(0.7) + 1.5(0.2) + 2(1.3) + 0.4(0.5) + 0.2(1) = 4.84$$

Para $n=6$

$$y(6) = h(0)x(0) + h(1)x(1) + h(2)x(2) + h(3)x(3) + h(4)x(4) + h(5)x(5) + h(6)x(6)$$

$$y(6) = (0.5)(0.7) + (1.2)1 + (0.7)(1.5) + (0.2)2 + (1.3)(0.4) + (0.5)(0.2) + 0.9(1) = 4.52$$