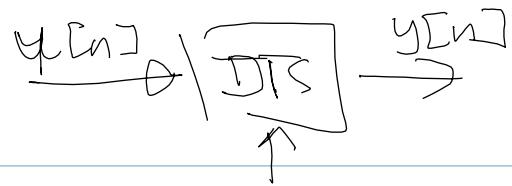


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$$\begin{aligned} y[n] - 0.5y[n-1] + 0.125y[n-2] &= \\ \underline{\underline{y[n]}} - 0.5\underline{\underline{y[n-1]}} + 0.125\underline{\underline{y[n-2]}} &= \\ = x[n] + x[n-1] & \end{aligned}$$

$$\begin{aligned} a). \quad \underline{\underline{Y(z)}} - 0.5z^{-1}Y(z) + 0.125z^{-2}Y(z) &= \\ = X(z) + z^{-1}X(z) & \end{aligned}$$

$$\begin{aligned} (1 - 0.5z^{-1} + 0.125z^{-2})Y(z) &= \\ = (1 + z^{-1})X(z) & \end{aligned}$$

$$\frac{Y(z)}{X(z)} = \frac{1 + z^{-1}}{1 - 0.5z^{-1} + 0.125z^{-2}}$$

$$= \frac{z^2 + z}{z^2 - 0.5z + 0.125}$$