ITEC451 Activity 10 - Solution

 $S_{\text{t+1}}$ = .9St + .2Ct and $C_{\text{t+1}}$ = .1St + .8Ct. Using matrix notation we obtain

$$\begin{bmatrix} \mathbf{S}_{t+1} \\ \mathbf{C}_{t+1} \end{bmatrix} = \begin{bmatrix} .9 & .2 \\ .1 & .8 \end{bmatrix} \begin{bmatrix} \mathbf{S}_{t} \\ \mathbf{C}_{t} \end{bmatrix}$$