



**TOPIC 12: Tutorial 3**

1. Solve the following difference equation  $y_{n+2} + y_n = 1$  given that  $y(0) = y(1) = 0$
2. Solve the following difference equation  $y_{n+3} - 3y_{n+1} + 2y_n = 0$  given that  $y(0) = y(1) = 0$
3. Solve the following difference equation  $y_{n+2} + 2y_{n+1} + y_n = n$  given that  $y(0) = y(1) = 0$