$$T(n) = T(n-1) + T(n-2)$$

$$\approx f(n) \quad \Rightarrow T(n) = \frac{\phi^n - \hat{\phi}^n}{\sqrt{5}}$$

$$\phi \approx \hat{\phi} \quad -1 < \hat{\phi} < 0 \quad \Rightarrow T(n) = \Theta(\phi^n)$$