



Practise Problem




Q01: Solve the recurrence relation $a_n = a_{n-1} + 2a_{n-2}$ ($n \geq 3$) with initial conditions $a_1 = 0$, $a_2 = 6$.

Q02: Solve the recurrence relation $a_n = 4a_{n-1} - 4a_{n-2}$ ($n \geq 3$) with initial conditions $a_1 = 1$, $a_2 = 3$.



Q03: Solve the Fibonacci recurrence relation $a_n = a_{n-1} + a_{n-2}$ with the consecutive initial conditions $a_0 = 1$ and $a_1 = 1$.

Q04: Solve the recurrence relation $a_n = a_{n-1} + 2a_{n-2}$ with the initial conditions $a_0 = 2$ and $a_1 = 7$.



Q05: Solve the recurrence relation $a_n = -3a_{n-1} - 3a_{n-2} - a_{n-3}$ with the initial conditions $a_0 = 1$, $a_1 = -2$, and $a_2 = -1$.

