

Consider the recurrence relation:

$$x_{n+2} = c_0x_n + c_1x_{n+1} \pmod{3}$$

Let's write the equations using the given values in the following table:

| n | x_n | x_{n+1} | x_{n+2} | Equation |
|-----|-------|-----------|-----------|--------------------------------|
| 0 | 1 | 1 | 0 | $0 = c_0(1) + c_1(1) \pmod{3}$ |
| 1 | 1 | 0 | 2 | $2 = c_0(1) + c_1(0) \pmod{3}$ |

From the table, we obtain the system of congruences:

$$\begin{cases} c_0 + c_1 \equiv 0 \pmod{3} \\ c_0 \equiv 2 \pmod{3} \end{cases}$$

Step 2: Solve the system

From the second congruence:

$$c_0 = 2$$

Substitute $c_0 = 2$ into the first congruence:

$$2 + c_1 \equiv 0 \pmod{3} \Rightarrow c_1 \equiv -2 \equiv 1 \pmod{3}$$

Final Answer:

$$c_0 = 2, \quad c_1 = 1 \pmod{3}$$