Problem :

$$\begin{cases} P_{i,j} = (1-p_a).P_{i,j+1} + P_{i-1,0}.\dfrac{p_c}{1+b_m} + \dfrac{p_a}{1+b_m}.\displaystyle\sum_{k=1}^{b_m} P_{i-1,k} & \forall i \in [1, e_m], \forall j \in [0, b_m - 1] \\ P_{i,b_m} = \dfrac{p_c}{1+b_m}.P_{i-1,0} + \dfrac{p_a}{1+b_m}.\displaystyle\sum_{k=0}^{b_m} P_{i-1,k} & \forall i \in [1, e_m] \\ P_{0,j} = (1-p_a).P_{0,j+1} + \dfrac{1}{1+b_m}.P_{e_m,0} + \dfrac{p_a}{1+b_m}.\displaystyle\sum_{k=1}^{b_m} P_{e_m,k} + \dfrac{1-p_c}{1+b_m}.\displaystyle\sum_{i=0}^{e_m-1} P_{i,0} & \forall j \in [0, b_m - 1] \\ P_{0,b_m} = \dfrac{1}{1+b_m}.P_{e_m,0} + \dfrac{p_a}{1+b_m}.\displaystyle\sum_{k=1}^{b_m} P_{e_m,k} + \dfrac{1-p_c}{1+b_m}.\displaystyle\sum_{i=0}^{e_m-1} P_{i,0} & \\ \displaystyle\sum_{i=0}^{e_m}\sum_{j=0}^{b_m} P_{i,j} = 1 & \end{cases}$$

Question :

Can I express $\mathbf{P_{i,j}}$ as function of : $\mathbf{e_m}$, $\mathbf{b_m}$, **i, j, pa, pc**

e_m, b_m, i, j : Integer

p_a, p_c : real in [0, 1]

$$\boxed{P_{i,j} \stackrel{?}{=} f(e_m, b_m, i, j, p_c, p_a)}$$