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ELECT

$$@ @ n=0 \quad P(2,0) = 80.1 \times 0.83 = 0.7 \quad (f(2,0) \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0)) = 5.15$$

$$t=0 \quad P(1,1) = 25.0 \times 0.83 = 0.1 \quad (20.1 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$P(0,5) = 5.0 \times 0.83 = 0.1 \quad (2.5 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$@ t=0 \quad P(3,1) = 25.0 \times 0.83 = 0.1 \quad (20.1 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{0,1} = 0 \quad P(0,1) = 5.0 \times 0.83 = 0.1 \quad (2.5 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,1} = 3(0.3)^2 = 0.27 \quad (0.27 \times 0.83 = 0.2241) \quad (0.2241 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,2} = 3(0.6)^2 = 1.08 \quad (1.08 \times 0.83 = 0.8964) \quad (0.8964 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,3} = 3(0.9)^2 = 2.43 \quad (2.43 \times 0.83 = 2.0169) \quad (2.0169 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,4} = 3(1.2)^2 = 4.32 \quad (4.32 \times 0.83 = 3.5856) \quad (3.5856 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,5} = 3(1.5)^2 = 6.75 \quad (6.75 \times 0.83 = 5.5925) \quad (5.5925 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,6} = 3(1.8)^2 = 9.72 \quad (9.72 \times 0.83 = 8.0676) \quad (8.0676 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,7} = 3(2.1)^2 = 13.23 \quad (13.23 \times 0.83 = 10.9809) \quad (10.9809 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,8} = 3(2.4)^2 = 17.28 \quad (17.28 \times 0.83 = 14.3424) \quad (14.3424 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,9} = 3(2.7)^2 = 21.87 \quad (21.87 \times 0.83 = 18.1521) \quad (18.1521 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,10} = 3(3.0)^2 = 27 \quad (27 \times 0.83 = 22.41) \quad (22.41 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,11} = 3(3.3)^2 = 32.67 \quad (32.67 \times 0.83 = 27.1161) \quad (27.1161 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,12} = 3(3.6)^2 = 38.88 \quad (38.88 \times 0.83 = 32.2704) \quad (32.2704 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,13} = 3(3.9)^2 = 45.63 \quad (45.63 \times 0.83 = 37.8729) \quad (37.8729 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,14} = 3(4.2)^2 = 52.92 \quad (52.92 \times 0.83 = 43.9236) \quad (43.9236 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,15} = 3(4.5)^2 = 60.75 \quad (60.75 \times 0.83 = 50.4225) \quad (50.4225 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,16} = 3(4.8)^2 = 69.12 \quad (69.12 \times 0.83 = 57.3696) \quad (57.3696 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,17} = 3(5.1)^2 = 78.03 \quad (78.03 \times 0.83 = 64.7649) \quad (64.7649 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,18} = 3(5.4)^2 = 87.48 \quad (87.48 \times 0.83 = 72.6084) \quad (72.6084 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,19} = 3(5.7)^2 = 97.47 \quad (97.47 \times 0.83 = 80.9001) \quad (80.9001 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

$$n_{1,20} = 3(6.0)^2 = 108 \quad (108 \times 0.83 = 89.64) \quad (89.64 \times ((0.83 \times 0) \times 0.1) + (0.83 \times 0 \times 0.1)) = 0.01$$

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$i=0, j=1$

$$u_{j+1,i} = v(u_{i,j}) + (1-2r)u_{i,j} + r(u_{i-1,j})$$

$$r = \frac{C \times \Delta t}{\Delta x^2} = \frac{2.2 \times 0.02}{(0.3)^2} = 0.489$$

$$@ f = 0.02$$

$$u_{0,0} = 0$$

i	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0
2	0	0.524	1.044	1.564	2.084	2.604	3.124	3.644	4.164	4.684	5.204	5.724	6.244	6.764	7.284	7.804	8.324	8.844	9.364	9.884	10.4
3	0	0.27	1.08	2.43	4.32	6.75	9.72	13.23	17.28	21.87	27	32.88	39.14	45.7	52.65	59.92	67.51	75.44	83.72	92.34	108
4	0	0.534	1.344	2.694	4.58	7.014	9.984	13.49	17.5	22.134	27.26	32.984	39.14	45.89	53.184	61.014	69.389	78.294	87.74	97.724	108