

$\Delta t := 1 \text{ s}$

$\Delta x := 10 \text{ m}$

$D1 := 28.33 \text{ m}^2/\text{s}$

$\overset{\text{ww}}{T} := 2000$

$X := 2000$

$t := 0 .. T - 1$

$x := 1 .. X - 1$

$v3 := 4.47 \text{ m/s}$

$f5_{0,X} := 0$

$f5_{0,1000} := 1$

$$f5_{t+1,x} := f5_{t,x} - \left(\frac{v3 \cdot \Delta t}{2 \cdot \Delta x}\right) \cdot \left(f5_{t,x+1} - f5_{t,x-1}\right) + \left[\frac{D1 \cdot \Delta t}{(\Delta x)^2}\right] \cdot \left(f5_{t,x-1} - 2 \cdot f5_{t,x} + f5_{t,x+1}\right)$$

f5 =

	0	1	2	3	4
0	0	0	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	...

$$f5_{t,x} := \begin{cases} f5_{t,x} & \text{if } f5_{t,x} \neq 0 \\ 1 & \text{otherwise} \end{cases}$$

	94	95	96	97	98
0	1	1	1	1	1
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	1	1	1	1	1
5	1	1	1	1	1
6	1	1	1	1	1
f5 = 7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1
10	1	1	1	1	1
11	1	1	1	1	1
12	1	1	1	1	1
13	1	1	1	1	1
14	1	1	1	1	1
15	1	1	1	1	...

	1094	1095	1096	1097	1098
1440	0	0	0	0	0
1441	0	0	0	0	0
1442	0	0	0	0	0
1443	0	0	0	0	0
1444	0	0	0	0	0
1445	0	0	0	0	0
1446	0	0	0	0	0
f5 = 1447	0	0	0	0	0
1448	0	0	0	0	0
1449	0	0	0	0	0
1450	0	0	0	0	0

1451	0	0	0	0	0
1452	0	0	0	0	0
1453	0	0	0	0	0
1454	0	0	0	0	0
1455	0	0	0	0	...