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Octave was configured for "x86_64-pc-linux-gnu".

Additional information about Octave is available at http://www.octave.org.

Please contribute if you find this software useful. For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports. For information about changes from previous versions, type 'news'.

```
a = 1.000000
l = 1.000000
n = 10
k = 10
hx = 0.100000
ht = 0.050000
alpha = 0.400000
beta = 0.010000
B =
 0 -1
 1 0
C =
 2.00000 -0.40000
 0.40000 2.00000
~C =
 2.00000 0.40000
 -0.40000 2.00000
Iteration #0 error: 0.000097
Iteration #1 w(t):
Columns 1 through 7:
 -21.87502 3.06399 -2.82812 20.17212 3.92969 -0.55539 4.74219
  6.02142 3.35845 -1.29376 0.26224 4.38401 7.30137 5.26562
Columns 8 through 11:
 -12.69995 5.09375 16.18692 7.13028
```

Iteration #1 h(t):

1

Iteration #1 error: 0.000097

Damper # 1

 $x_1 = 0.200000$

w 1(t) * δ

 $-21.875020\ 3.063990\ -2.828120\ 20.172120\ 3.929690\ -0.555390\ 4.742190\ -12.699950\ 5.093750\ 16.186920\ 7.130280$

Damper # 2

x 2 = 0.600000

 $w_2(t) * \delta$

6.021420 3.358450 -1.293760 0.262240 4.384010 7.301370 5.265620 16.533230 5.960940 2.249800 -5.477350

u(x, t)

T = 0.000000: 0.000000 0.077254 0.146946 0.202254 0.237764 0.250000 0.237764 0.202254 0.146946 0.077254 0.000000

 $T = 0.050000; 0.000000 \ 0.079570 \ 0.143106 \ 0.192119 \ 0.227327 \ 0.249133 \ 0.257330 \ 0.249455 \ 0.217637 \ 0.144512 \ 0.000000$

T = 0.100000: 0.000000 0.067382 0.132777 0.192201 0.242888 0.279133 0.290009 0.261767 0.187102 0.081332 0.000000

T = 0.150000: $0.000000 \ 0.099670 \ 0.177244 \ 0.231314 \ 0.250063 \ 0.221628 \ 0.146533 \ 0.047208 \ -0.033214 \ -0.051053 \ 0.000000$

T = 0.200000: 0.000000 0.132882 0.191859 0.168078 0.077063 -0.046250 -0.157661 -0.220287 -0.219393 -0.155479 0.000000

T = 0.250000: 0.000000 - 0.031787 - 0.089785 - 0.166397 - 0.244967 - 0.304215 - 0.329941 - 0.316791 - 0.256935 - 0.139969 0.000000

 $T = 0.300000: 0.000000 - 0.201023 - 0.380359 - 0.487627 - 0.513509 - 0.479463 - 0.410618 - 0.320319 - 0.219377 - 0.123390 \ 0.000000$

T = 0.350000: 0.000000 - 0.113679 - 0.261782 - 0.412331 - 0.525743 - 0.568950 - 0.535477 - 0.447285 - 0.326815 - 0.169756 0.000000

T = 0.400000: $0.000000 \ 0.009949 \ -0.039156 \ -0.139039 \ -0.272222 \ -0.409099 \ -0.505729 \ -0.512975 \ -0.408014 \ -0.226541 \ 0.000000$

 $T = 0.450000: 0.000000 \ 0.022465 \ 0.017750 \ -0.013027 \ -0.068247 \ -0.140462 \ -0.216379 \ -0.282062 \ -0.312007 \ -0.237880 \ 0.000000$

T = 0.500000: 0.000000 0.000077 -0.000344 -0.001010 0.000128 -0.000423 -0.010493 -0.023809 -0.017573 -0.000500 0.000000





