

```
1  program problem
2
3      use iso_fortran_env, only: dp=>real64
4      use linspace_mod
5      use tdma
6
7      implicit none
8      !output utility
9      integer, parameter :: outfile = 16
10     integer, parameter :: outfile2 = 17
11
12     !enter problem you want to solve here
13     !problem 1
14     !declarations
15     integer, parameter :: n = 7
16     double precision, dimension(1:n) :: line = (/100.0, 0.0, 0.0, 0.0, 0.0, 0.0, 600.0/)
17     double precision, dimension(1:n) :: a = (/1.0, 3.0, 2.0, 2.0, 2.0, 3.0, 1.0/)
18     double precision, dimension(1:n) :: b = (/0.0, 1.0, 1.0, 1.0, 1.0, 0.0, 0.0/)
19     double precision, dimension(1:n) :: c = (/0.0, 0.0, 1.0, 1.0, 1.0, 1.0, 0.0/)
20     double precision, dimension(1:n) :: d = (/100.0, 204.0, 12.0, 20.0, 28.0, 1236.0, 600.0/)
21     integer :: i
22     call onetdma(n,a,b,c,d,line)
23     print*, line
24
25
26 end program problem
27
```