

Lab 4

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My Solutions

```
>> [d,f] = cholesky(2,1,2)
d =
    1.4142    1.2247

f =
     0    0.7071

>> L=[1.4142, 0;0.7071,1.2247]
L =
    1.4142     0
    0.7071    1.2247

>> L*L'
ans =
    2.0000    1.0000
    1.0000    1.9999

>> c=[1,2]'
>> [x,y]=triDiag(2,-1,c,2)

x =
    1.3333    1.6667

y =
    0.7071    2.0412

>> c=[1,2,3,4,5,6,7,8,9,10]'
>> [x,y]=triDiag(2,-1,c,10)

x =
Columns 1 through 8:
    15.144    29.288    41.432    50.800    56.778    58.883    56.726    49.993

Columns 9 and 10:
    38.428    21.822

y =
Columns 1 through 7:
     0.7071     2.0412     3.8481     6.0114     8.4447    11.0833    13.8788

Columns 8 through 10:
    16.7950    19.8046    22.8869
```