**octave:1>**   
**octave:1>** A=[3.6017 3 0;1 1.6017 1;0 2 2.6017]  
A =  
  
 3.6017 3.0000 0  
 1.0000 1.6017 1.0000  
 0 2.0000 2.6017  
  
**octave:2>** A(2,:)=A(2,:)-A(1,:)/3.6017  
A =  
  
 3.6017 3.0000 0  
 0 0.7688 1.0000  
 0 2.0000 2.6017  
  
**octave:3>** A(3,:)=A(3,:)-A(2,:)\*2/0.7688  
A =  
  
 3.6017 3.0000 0  
 0 0.7688 1.0000  
 0 0.0001 0.0002  
  
**octave:4>** -1/0.7688  
ans = -1.3007  
**octave:5>** -3\*ans/3.6017  
ans = 1.0834  
*NOTICE: Due to inactivity, your session will expire in five minutes.*  
*Octave Exited. Message: Session Timeout*  
  
**octave:1>** A=[3 3 0;1 1 1;0 2 2]  
A =  
  
 3 3 0  
 1 1 1  
 0 2 2  
  
**octave:2>** eig(A)  
ans =  
  
 -0.6017  
 4.2618  
 2.3399  
  
**octave:3>** v=[1;1;1]  
v =  
  
 1  
 1  
 1  
  
**octave:4>** z=A\*v  
z =  
  
 6  
 3  
 4  
  
**octave:5>** lamda=norm(z,inf)  
lamda = 6  
**octave:6>** v=z/lamda  
v =  
  
 1.0000  
 0.5000  
 0.6667  
  
**octave:7>** z=A\*v  
z =  
  
 4.5000  
 2.1667  
 2.3333  
  
**octave:8>** v=z/lamda  
v =  
  
 0.7500  
 0.3611  
 0.3889  
  
**octave:9>** v=z/lamda  
v =  
  
 0.7500  
 0.3611  
 0.3889  
  
**octave:10>** z=A\*v  
z =  
  
 3.3333  
 1.5000  
 1.5000  
  
**octave:11>** lamda=norm(z,inf)  
lamda = 3.3333  
**octave:12>** z=A\*v  
z =  
  
 3.3333  
 1.5000  
 1.5000  
  
**octave:13>** v=[1;1;1]  
v =  
  
 1  
 1  
 1  
  
**octave:14>** z=A\*v  
z =  
  
 6  
 3  
 4  
  
**octave:15>** lambda=norm(z,inf)  
lambda = 6  
**octave:16>** v=z/lambda  
v =  
  
 1.0000  
 0.5000  
 0.6667  
  
**octave:17>** z=A\*v  
z =  
  
 4.5000  
 2.1667  
 2.3333  
  
**octave:18>** lambda=norm(z,inf)  
lambda = 4.5000  
**octave:19>** v=z/lambda  
v =  
  
 1.0000  
 0.4815  
 0.5185  
  
**octave:20>** z=A\*v  
z =  
  
 4.4444  
 2.0000  
 2.0000  
  
**octave:21>** lambda=norm(z,inf)  
lambda = 4.4444  
**octave:22>** v=z/lambda  
v =  
  
 1.0000  
 0.4500  
 0.4500  
  
**octave:23>** z=A\*v  
z =  
  
 4.3500  
 1.9000  
 1.8000  
  
**octave:24>** lambda=norm(z,inf)  
lambda = 4.3500  
**octave:25>** v=z/lambda  
v =  
  
 1.0000  
 0.4368  
 0.4138  
  
*NOTICE: Due to inactivity, your session will expire in five minutes.*  
*Octave Exited. Message: Session Timeout*  
  
**octave:1>** A  
*error: 'A' undefined near line 1, column 1*  
**octave:2>** A=[3 3 0 ;1 1 1;0 2 2]  
A =  
  
 3 3 0  
 1 1 1  
 0 2 2  
  
**octave:3>** v=[1 1 1]'  
v =  
  
 1  
 1  
 1  
  
**octave:4>** z=inv(A)\*v  
z =  
  
 0.5000  
 -0.1667  
 0.6667  
  
**octave:5>** lambda=1/norm(z,inf)  
lambda = 1.5000  
**octave:6>** v=z/norm(z,inf)  
v =  
  
 0.7500  
 -0.2500  
 1.0000  
  
**octave:7>** z=inv(A)\*v  
z =  
  
 -0.7500  
 1.0000  
 -0.5000  
  
**octave:8>** lambda=1/norm(z,inf)  
lambda = 1  
**octave:9>** v=z/norm(z,inf)  
v =  
  
 -0.7500  
 1.0000  
 -0.5000  
  
**octave:10>** z=inv(A)\*v  
z =  
  
 1.2500  
 -1.5000  
 1.2500  
  
**octave:11>** v=z/norm(z,inf)  
v =  
  
 0.8333  
 -1.0000  
 0.8333  
  
**octave:12>** z=inv(A)\*v  
z =  
  
 -1.4167  
 1.6944  
 -1.2778  
  
**octave:13>** lambda=1/norm(z,inf)  
lambda = 0.5902  
**octave:14>** v=z/norm(z,inf)  
v =  
  
 -0.8361  
 1.0000  
 -0.7541  
  
**octave:15>** for i=1:10  
> **>** z=inv(A)\*v  
> **>** lambda=1/norm(z,inf)  
> **>** v=z/norm(z,inf)  
> **>** end for  
*error: parse error:*  
  
 *syntax error*  
  
*>>> end for*  
 *^*  
**octave:15>** end  
*error: parse error:*  
  
 *syntax error*  
  
*>>> end*  
 *^*

**octave:15>** for i=1:10  
> **>** z=inv(A)\*v  
> **>** lambda=1/norm(z,inf)  
> **>** v=z/norm(z,inf)  
> **>** end  
z =  
  
 1.3770  
 -1.6557  
 1.2787  
  
lambda = 0.6040  
v =  
  
 0.8317  
 -1.0000  
 0.7723  
  
z =  
  
 -1.3861  
 1.6634  
 -1.2772  
  
lambda = 0.6012  
v =  
  
 -0.8333  
 1.0000  
 -0.7679  
  
z =  
  
 1.3839  
 -1.6617  
 1.2778  
  
lambda = 0.6018  
v =  
  
 0.8328  
 -1.0000  
 0.7690  
  
z =  
  
 -1.3845  
 1.6621  
 -1.2776  
  
lambda = 0.6017  
v =  
  
 -0.8330  
 1.0000  
 -0.7687  
  
z =  
  
 1.3843  
 -1.6620  
 1.2777  
  
lambda = 0.6017  
v =  
  
 0.8329  
 -1.0000  
 0.7687  
  
z =  
  
 -1.3844  
 1.6620  
 -1.2776  
  
lambda = 0.6017  
v =  
  
 -0.8329  
 1.0000  
 -0.7687  
  
z =  
  
 1.3844  
 -1.6620  
 1.2776  
  
lambda = 0.6017  
v =  
  
 0.8329  
 -1.0000  
 0.7687  
  
z =  
  
 -1.3844  
 1.6620  
 -1.2776  
  
lambda = 0.6017  
v =  
  
 -0.8329  
 1.0000  
 -0.7687  
  
z =  
  
 1.3844  
 -1.6620  
 1.2776  
  
lambda = 0.6017  
v =  
  
 0.8329  
 -1.0000  
 0.7687  
  
z =  
  
 -1.3844  
 1.6620  
 -1.2776  
  
lambda = 0.6017  
v =  
  
 -0.8329  
 1.0000  
 -0.7687