```
function [C] = createdC(a)
n=length(a);
u0=ones(n,1);
C=zeros(n,n);
C=diag(ones(1,n-1),-1);
C(1:n,n)=-a;
end
```

```
function [u0,lambda] = maxroot(C)
n=length(C);
u0=ones(n,1);
miu0=0;
y=C*u0;
[miu1,i]=max(abs(y));miu=y(i);
u1=y/miu1;
while (norm(u0-u1,inf)>10^(-10)) & (abs(miu0-miu1)>10^(-10))
    miu0=miu1;
    y=C*u1;
    u0=u1;
    miu1=y(find(abs(y)==norm(y,inf)));
    u1=y/miu1;
end
u0=u1;lambda=miu1;
end
```

```
a1=[3 -5 1]';
u=1e-10;
[u1,lambda1]=maxroot(createdC(a1));
lambda1
a2=[-1 -3 0]';
[u2,lambda2]=maxroot(createdC(a2));
lambda2
a3=[-1000 790 -99902 79108.9 9802.08 10891.01 208.01 101]';
[u3,lambda3]=maxroot(createdC(a3));
lambda3
```

```
lambda1 =

   -3.0000


lambda2 =

    1.8794
```

```
lambda3 =

 -100.0000
```

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