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EDU» %First, Jacobi iteration. Here is my code:
EDU» type network
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error=100;k=1;
while k<=100 & error > 1E-5
    jacobi
    error=max(max(abs(A-C)));
    k = k+1;
    C=A;
end
A
k-1
EDU» type jacobi

m=2;n=2;
while m<=4
    while n<=6
        A(m,n)=(1/4)*(C(m+1,n)+C(m-1,n)+C(m,n+1)+C(m,n-1));
        n=n+1;
    end
    n=2;
    m=m+1;
end
A(5,2)=(1/3)*(C(4,2)+C(5,3)+1);
A(5,5)=(1/3)*(C(5,4)+C(5,6)+C(4,5)+1);
A(5,4)=(1/4)*(C(5,3)+C(5,5)+C(4,4));
A(5,3)=(1/4)*(C(5,2)+C(5,4)+C(4,3));
A(5,6)=(1/4)*(C(5,5)+C(4,6));
EDU» A=zeros(5,7);C=A;
EDU» network
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A =
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0	0	0	0	0	0	0
0	0.0320	0.0483	0.0551	0.0518	0.0301	0
0	0.0798	0.1062	0.1201	0.1222	0.0684	0
0	0.1810	0.1765	0.1970	0.2485	0.1214	0
0	0.4676	0.2218	0.2430	0.5534	0.1687	0

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ans =
54
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EDU» %Now for Seidel iteration:
EDU» type network1
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```
error=100;k=1;
while k<=100 & error > 1E-5
    seidel
    k = k+1;
end
C
k-1
EDU» type seidel

m=2;n=2;err=0;
while m<=4
    while n<=6
        thing=(1/4)*(C(m+1,n)+C(m-1,n)+C(m,n+1)+C(m,n-1));
        temp=abs(thing-C(m,n));
        if temp-err > 0
            err=temp;
        end
        C(m,n)=thing;
        n=n+1;
    end
    n=2;
    m=m+1;
end
thing=(1/3)*(C(4,2)+C(5,3)+1);
temp=abs(thing-C(5,2));
if temp - err > 0
    err=temp;
end
C(5,2)=thing;
thing=(1/3)*(C(5,4)+C(5,6)+C(4,5)+1);
temp=abs(thing-C(5,5));
if temp - err > 0
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        err=temp;
    end
    C(5,5)=thing;
    thing=(1/4)*(C(5,3)+C(5,5)+C(4,4));
    temp=abs(thing-C(5,4));
    if temp - err>0
        err=temp;
    end
    C(5,4)=thing;
    thing=(1/4)*(C(5,2)+C(5,4)+C(4,3));
    temp=abs(thing-C(5,3));
    if temp - err>0
        err=temp;
    end
    C(5,3)=thing;
    thing=(1/4)*(C(5,5)+C(4,6));
    temp=abs(thing-C(5,6));
    if temp - err>0
        err=temp;
    end
    C(5,6)=thing;
    error=err;
EDU» C=zeros(5,7);
EDU» network1

```

```

C =

    0         0         0         0         0         0         0
    0    0.0320    0.0483    0.0551    0.0518    0.0301    0
    0    0.0798    0.1062    0.1201    0.1222    0.0684    0
    0    0.1810    0.1765    0.1970    0.2485    0.1214    0
    0    0.4676    0.2218    0.2431    0.5534    0.1687    0

```

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ans =

    30

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EDU»

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