ICE for Gauss Seidel

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```
% 1
clear all; clc;
T = [0 0 0 0 0;
    75 0 0 0 50;
    75 0 0 0 50;
    75 0 0 0 50;
    100 100 100 100 100];
Tt = [0;0;0;0;0;0;0;0;0];
lambda = 1.5;
err = 1;
while 1
    for i = 2:4
        for j = 2:4
            tmp = T(i,j);
            T(i,j) = lambda*(T(i+1,j)+T(i-1,j)+T(i,j+1)+T(i,j-1))/4+(1-lambda)*T(i,j);
            err = min(err,abs(T(i,j)-tmp)/T(i,j));
        end
    end
    if err < 0.001
        break;
    end
end
T(2:4,2:4)
```

```
ans = 3×3
   43.0006   33.2975   33.8851
   63.2115   56.1124   52.3400
   78.5872   76.0640   69.7105
```