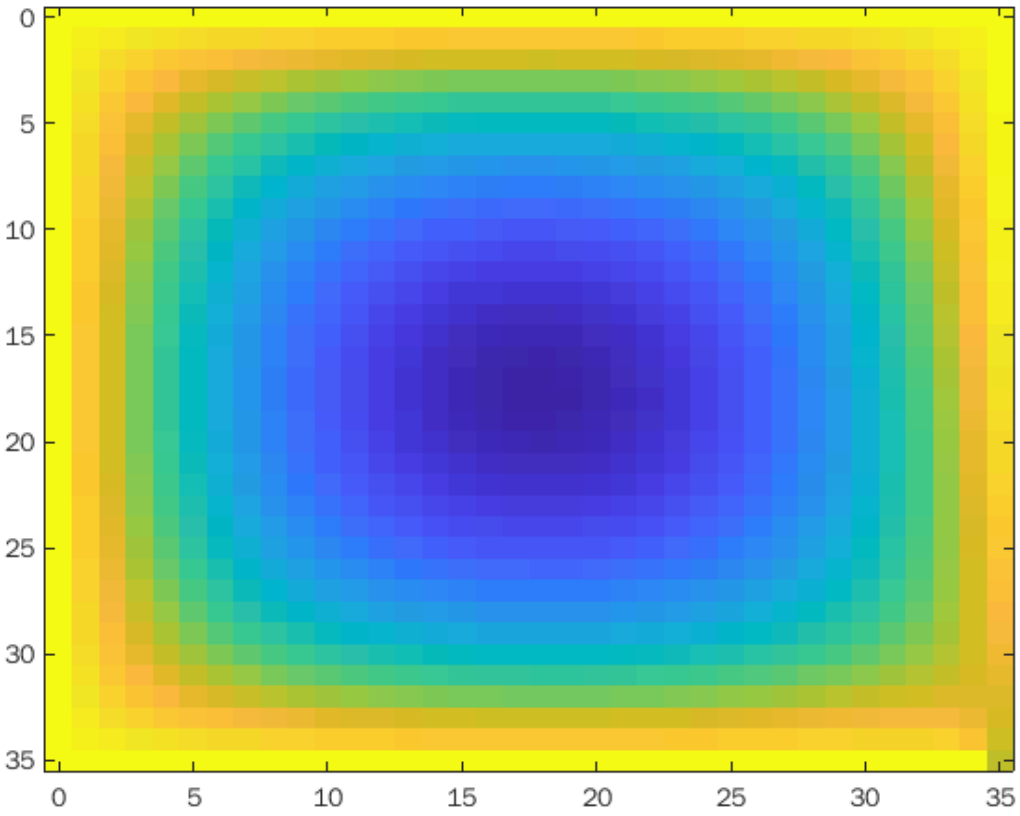
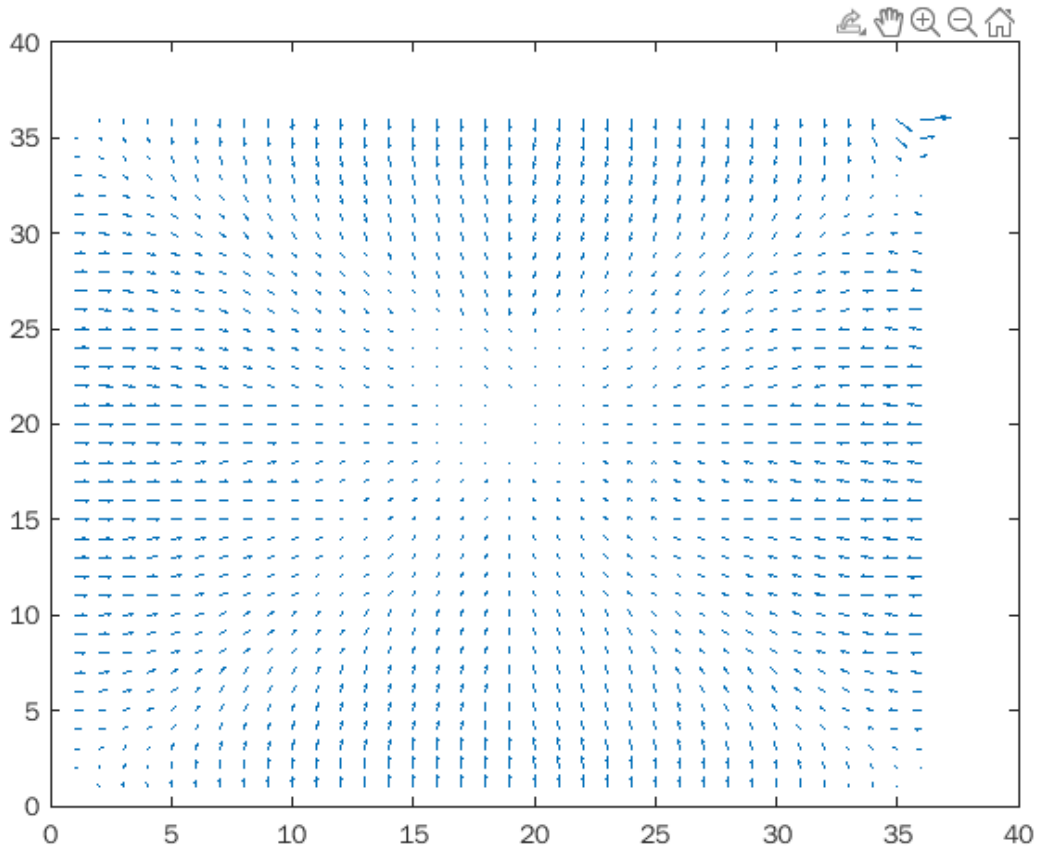
```
h = 1;
k = 1;

x = 0:h:35;
y = 0:k:35;

n = length(x);
m = length(y);

u = zeros(n, m);
for i=1:n
    u(i, m) = 4*x(i)*(1-x(i));
end

err = 1;
EMF = 200;
while err > 0.00001
    ma = 0;
    for i=2:n-1
        for j=2:m-1
            prev=u(i,j);
            u(i,j)=(((u(i+1,j)+u(i-1,j))/(h*h))+((u(i,j+1)+u(i,j-1))/(k*k))-
EMF)*(h*h)*(k*k)/(2*((h*h)+(k*k)));
            if ma<abs(u(i,j)-prev)
                ma=abs(u(i,j)-prev);
            end
        end
    end
    err = ma;
end

figure(1)
imagesc(x, y, u);

figure(2)
[dx, dy] = gradient(u);
quiver(-dx, -dy);
```


0
5
10
15
20
25
30
35
0
5
10
15
20
25
30
35



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