
```
%CAO Chunyang
%55668390
m=1251;
n=1001;
B=zeros(n,m);
x=linspace(-1.5,1,m);
y=linspace(-1,1,n);
for j=1:m
    for p=1:n
        z(1)=x(j)+1i*y(p);
        k=1;
        while (abs(z(k))<2 && k<201)
            k=k+1;
            z(k)=(z(k-1)^2)-0.7-0.4i;
        end
        B(p,j)=(abs(z(k)))/(k.^0.5);
    end
end
pcolor(x,y,B)
colorbar
shading flat
title('CAO Chunyang, 55668390')
```

