

```

grid on
hold on

x=rand; y=rand; plot(x,y,'kx')
A=[0,x]'; B=[0,y]';
x1=0; y1=0; plot(x1,y1,'bs')
x2=.5; y2=(.5*sqrt(3)); plot(x2,y2,'bs')
x3=1; y3=0; plot(x3,y3,'bs')

for n=1:50000
    A=cat(1,A,x);
    B=cat(1,B,y);
    r=randi(3,1);
    if r==1
        x=.5*(x+x1);
        y=.5*(y+y1);
    end
    if r==2
        x=.5*(x+x2);
        y=.5*(y+y2);
    end
    if r==3
        x=.5*(x+x3);
        y=.5*(y+y3);
    end
end
plot(A,B,'r.','markersize',1)

```