

```

clear all
x=5:1.2:15.8;
d=[0.09,0.23,0.53,0.54,0.65,0.78,0.9,0.87,0.88,1.02];
x=x/15.8;
w(1)=0; b(1)=0; eta=0.01; NN=10; Epok=200; alpha =0.97;
for k=1:Epok
    sume=0;
    sumex=0;
    for p=1:NN
        ep=d(p)-(w(k)*x(p)+b(k));
        sume=sume+ep;
        sumex=sumex+ep*x(p);
    end
    sume_plot(k)=sume;
    if(k >= 2)
        w(k+1)=w(k)+eta*sumex +alpha*(w(k)-w(k-1));
    else
        w(k+1)=w(k)+eta*sumex;
    end
    b(k+1)=b(k)+eta*sume;
end

RMSE=sqrt((sume.^2)/length(x))
SSE=sum(sume.^2)

figure(1)
dd = w(length(w))*x+b(length(b));
plot(x,d);
title('Funkcja fd(x) i f(x)');xlabel('Punkty'); ylabel('fd(x) i f(x)');
hold on
plot(x,dd);

```