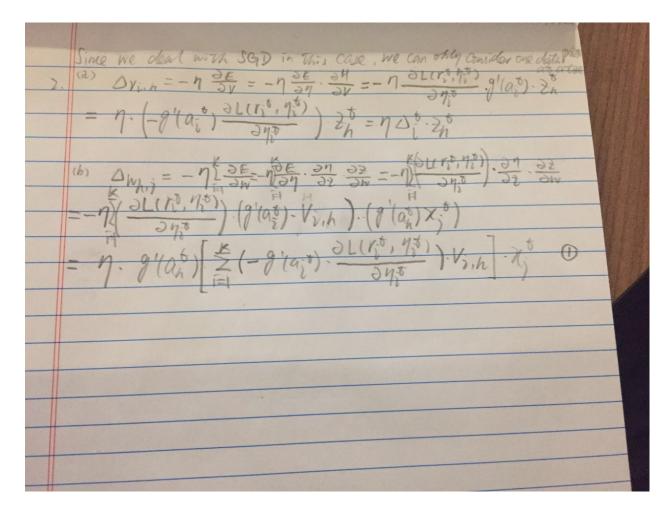
hw 4 (a) No. Wis a dxD matrix where each row is WTW= I in this way. Moneyer, W is only Dxd where ckD. And W + W | some w doesn't exist for rectangular nating
Then WW + I so V = W + T = WW X + X * (b) No. = \(\frac{7}{2} \left(\chi^{\frac{1}{2}} \right)^{\frac{1}{2}} = N - 2 \(\frac{7}{2} \) \(\frac{1}{2} \) \(\frac{1} which equals & \(\times \) (\(\times \)) = 0 Because eigenvector cannot be zero and w is not invertible.

WWT + 0 and WWT + I so \ \frac{\infty}{\infty} \frac{\infty}{\tau} \left(\text{WW} \right) \left(\text{WW} \right) \left(\text{WW} \right) \right) + 0

Thus, \frac{\infty}{\infty} \left(\frac{\infty}{\infty} \right) \frac{\infty}{\infty} \ri



Q3 Summary

MyFLDA2 with Boston50

K=0	K=1	K=2	K=3	K=4	Mean	Std
0.168316831683	0.0891089108911	0.108910891089	0.277227722772	0.0882352941176	0.146359930111	0.0716478439556

MyFLDA2 with Boston75

K:	=0	K=1	K=2	K=3	K=4	Mean	Std
0.2	07920792079	0.0891089108911	0.247524752475	0.158415841584	0.0588235294118	0.152358765288	0.0706112973162

LogisticRegression with Boston50

K=0	K=1	K=2	K=3	K=4	Mean	Std
0.128712871287	0.108910891089	0.0891089108911	0.267326732673	0.117647058824	0.142341292953	0.0638250381703

LogisticRegression with Boston75

K=0	K=1	K=2	K=3	K=4	Mean	Std
0.0891089108911	0.128712871287	0.138613861386	0.108910891089	0.0490196078431	0.102873228499	0.0318471419286

les.
extra max(0,a) = Sa, if a>0 \frac{1}{2} min(0,a) = So if a>0
n if ass
$f_{s(a)} = h_{a \times (0, a)} + f_{h in(0, a)} = s a, \forall a > 0$ $\int \int \int \int \int \int \partial u du d$
Cl itas
2 to (a/a) - } 1 it
$\frac{\partial f_{\delta}(\omega)}{\partial a} = \int $
3h = (40 - fer(MIXQ)) . XQ , of MIXQ10
1- (no-folin(mixt)).Xt, if Mixted
19,5 2Xx. Xx 2 1 1 1 Xx250 - 25(Xx), 34 M,X 0>0
J'L SZXt. Xt if N'Xtso - SZ(Xt), if W'Xtso JW - Xt. ZXt if W'Xtso - SZ(Xt), if W'Xtso for W'Xt FR, 32 20, Thus St (w) is a connex function of W
for with ER 32 >0. Thus sq (w) is a convex function of W
I'V W \ C , SV - SV