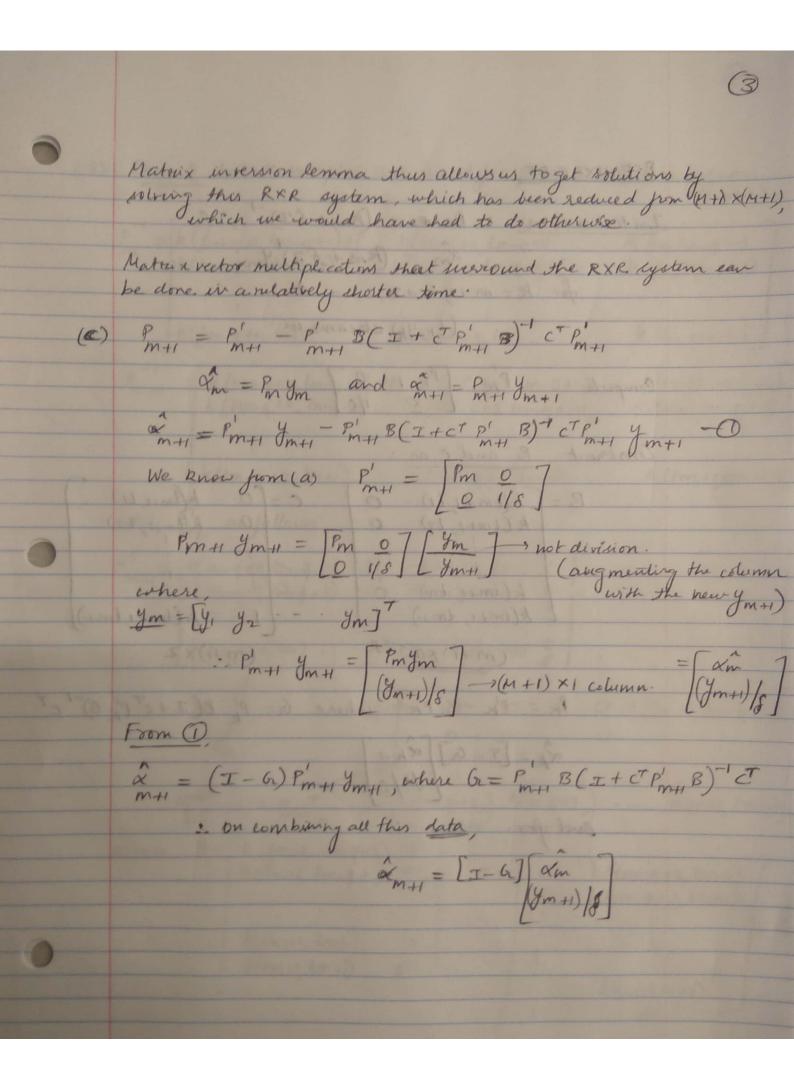
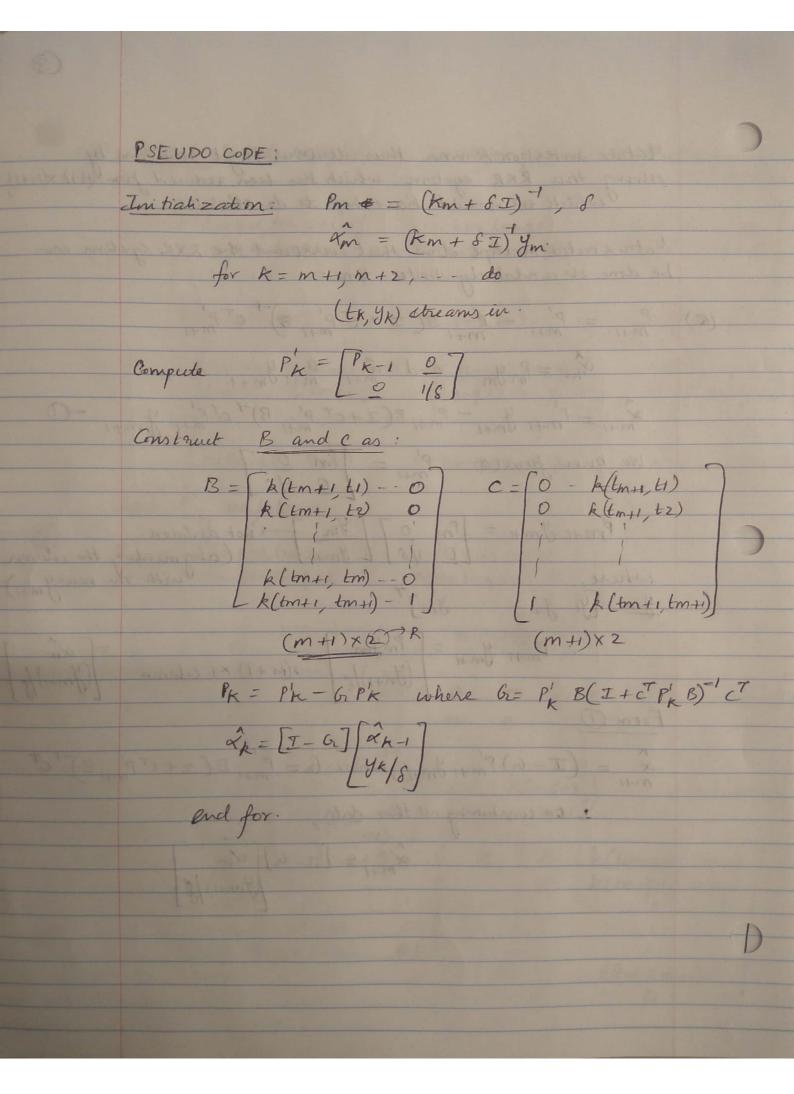
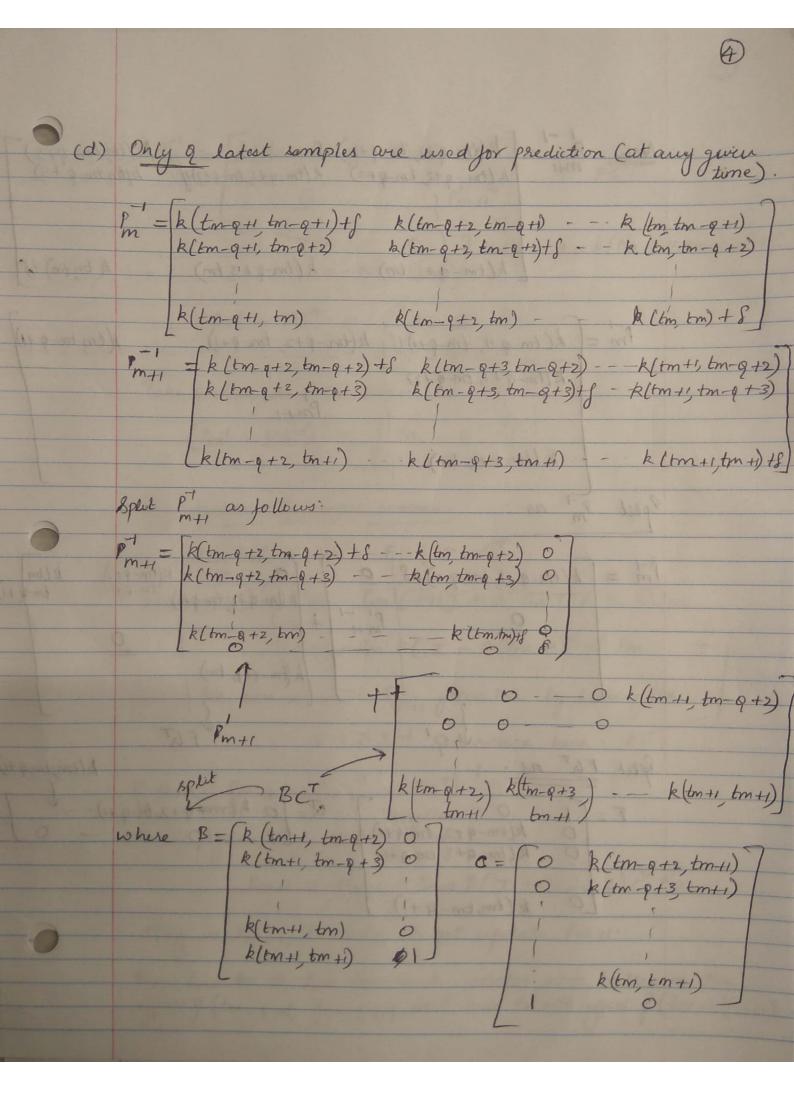


where $B = k(t_m + t_1) 0$; $C = \{0, 0 - - 1\}$ $k(t_m + t_2) 0$ $k(t_m + t_2) 0$ $k(t_m + t_2) 0$ [k(tm+1, tm+1) 21] : c= [0 k(tm+, t) 0 k(tm+, t2) 0 k (tm+1, tm) $BCT = \begin{cases} k(tm+1,t1) & 0 \\ k(tm+1,t2) & 0 \end{cases}$ $k(tm+1,t2) & 0 \\ k(tm+1,t1) & k(tm+1,t2) & k(tm+1,tm) \end{cases}$ k(tm+, tm+1) 91) ->B Let W= Pm+1 X =B, Y=I and Z=cT Applying Matrix Inversion Lemma, =) Pm+1 = P' - P' B (I+ CTP' B) CTP'm+1 Here, $C^T \rightarrow R \times (M+1)$ $B \rightarrow (M+1) \times R$ R = 2 here $P'_{M+1} \rightarrow (M+1) \times (M+1)$ CTPM+1B-> RXR ICA (I + CT Pm+1 B) -> Bolving for RXR
system of equations.







Now P [& (+m-8+2 bm-8+2)+C
Now $P = \begin{cases} k(tm-q+2, tm-q+2) + S - \\ k(tm-q+2, tm-q+3) \end{cases} k(tm-q+3, tm-q+3) + \begin{cases} k(tm, tm-q+2) \\ k(tm, tm-q+3) \end{cases}$
C = Klage (mage) of Klanger 2m e - Klan
[k(tm-q+2, bn) k(tm-p+3, tm) k(tm+m)+8
[k(tm-q+2, bn) k(tm-p+3, tm) k(tm,tm)+8
C (Market Com) . Market Com) 1 - M (com)
Pm = k(tm-q+1, tm-q+1)+5 k(tm-q+2, tm-q+1) - K(tm tm-q+1)
Pm = k(tm-q+1, tm-q+1)+s' k(tm-q+2, tm-q+1) - k(tm, tm-q+1) $k(tm-q+1, tm-q+2)$
Pm+1
k (tm-q+1, tm)
Split Pm as:
1 0 (capies call) - 3+ (as bed second) - 19
Pm = (k(tm-q+1)+8 0) (0 - k(tm-q+2) - k(tm) k(tm-q+1) tm q+
O Pri- t
(4 (for all tra)
[k(m-9+1, tm)
Split FGT as:
plet in as.
F=[] 0
0 k(tm-q+2,tm-q+1) 0 0)
LO k (6m, 6m-9+1)
Kenner bar a comment
Constant to 1
Charache San Andrewson Control of the Andrewson Control of the Con

 $P_{m}^{-1} = \left[\frac{k(t_{m-q+1}, t_{m-q+1}) + \delta}{Q} + F_{m+1}^{-1}\right] + F_{m}^{-1}$ $\int a \quad O \quad \text{where} \quad a = k(tm - Q + I, tm - Q + I) + J$ $O \quad P'm + I \quad \text{where} \quad a = k(tm - Q + I, tm - Q + I) + J$ $Pm^{\prime} - Fa^{\dagger} = \begin{cases} a & 0 \\ 0 & p^{\prime}_{m+1} \end{cases}$ Take inverse on both sides: (Pmt - Fat) = [la 0] By Matrix - Inversion Lemma: Now W= Pmt X=-F, Z-Gt (Pmt-FGT) = Pm - Pm (-F) (I + GT Pm (-F)) GT Pm = Pm + Pm F(I - GTPm F) GT Pm : We can compute I'm+, from Pm by taking the 9-1 × 9-1 Submatrix here. E. Ethen, Pm+1 = (P'm+1 + BCT) -1
Invenion

Again, by matrix lemma Pm+1 = Pm+1 - Pm+1 B(I+CPm+1 B) CPm+1 Plug in Pm+1, B and c to get update Pm+1. thus, had to do two low-rank updates once to remove the effect of (tm-q+1, ym-q+1) and once to add effect of (tm+1, ym+1).