	Nystrom extension
	=> Given 4- (V.11)
	(Ken K.)
	Prove KBB = KBA KAA KAB
	100 miles of marchant in
	Proof
()	La I WAU WALL A
	Now given the matrix K= (KAA KAB), we nead
	Ka. Ka.
	to note that there will be a non-zèro
1	e igenvalue >
144.77	(A) is a first of the stand of the second
	= 17 hus, we apply singular - value de composition.
	on K to obtain the below function
*	- 10A, U = 40 X
	K = U A U
	whereby U stores the ergonvectors
	and the corresponding eigenvalues arranged in)
	with anyon 2 . is promised at A long .
	=> NOW, proking ny elements uniformly at random,
	we obtain a simplified Version of tull rank
	given by matrice KAA MINIE WIA (=)
A	=> Ow main task now is to evaluate a every entry
T.	in matrix KAA which is nxn mand initially
	for KBA
	: atta 2062 +0 23H 12H
	=> I norder to achieve this we near to split up the
	eigen decomposition / who the olk matrix as below
	Enjan o
	cinco k= U/U it follows that the
	=) Since
- Sty	o(Gen Valus)
	K- matrix will be given as

	T TOTAL TOTAL
	$K = [u_1] \lambda [u_1]$
	$X = \begin{bmatrix} u_1 \\ u_2 \end{bmatrix} \lambda \begin{bmatrix} u_1 \\ u_2 \end{bmatrix}$
	=) Simplifying this further we get
Anna Control of the C	
	$K = [u, \lambda u, u, \lambda u]$
larett y	$K = \begin{bmatrix} u_1 \lambda u_1^T & u_1 \lambda u_2^T \\ u_2 \lambda u_1^T & u_2 \lambda u_3^T \end{bmatrix}$

	Where U is overally nxn
	=> Notice therefore we have KAA from (7) given
	by the first entry on the matrix (x)
	$= \sum_{i=1}^{n} K_{AA} = U_{i} \lambda U_{i}^{T}$
	(U, U, U) = (U, U, U)
tration.	= 10000, since we know what Kee is
KA	Can easily calculate the value of U, and I by perturing a singular-value eigen decomposition on KiAA
	and I by perturing a singular - Value
- grant and	eigen decomposition on King
i strey	· Hut- 1 Cares to the total the state of the
	=) Also, similary from & KBA = U2 & U,T
The second	
patres just	=) Next we find the value of Uz from KRA
plan.	by right-multiplying all sides by u, x-1
	=) This results into:
	1/96 advantagive our side sunday
ASSESSMENT OF THE PARTY OF THE	the state of the s
	MANUEL STORGAMIN CONTROL CASSIS INTERESTED IN THE PROPERTY OF
1	of and prove its
	Phuivalance to

	=> Note that from mature representation (x), we	have
		7 7 7 77
	KBB given by	
	KBB= Uz XUz	1
		Subathile
	= 1 But since we have Uz, we now just	50(36) 14-(
	into the above equation to find KBB	
	= λ	
	TOR TO THE TOTAL THE TOTAL TO T	
- 1	=) Mis results into	
	=> Mis results into KBB = KBAU, (1-1) 1 U, TKBAT	
	,	
	= KBAU, J-1U, TKBAT	<u> </u>
	the state of the s	
	=) Note that KAA = U, & U, T, implying that	1 2 15 3
	$K_{AA}^{-1} = U_1 \lambda^{-1} U_1^{-1}$	
	TO A A COLL OIL	
	2) Next replace KAAT into KBB equation	abin
No.		
	=> KBAKAA KBA	
	NOOR THOR WASH	apore.
	we have	1 100
	16 AR = KRAKAA KAR	198
The same	KBB= KBAKAA KAB	-1 - 42
-		
	THANK YOU!	1000
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
\$1.50	AND THE RESIDENCE OF THE PARTY	NAME OF THE PARTY OF