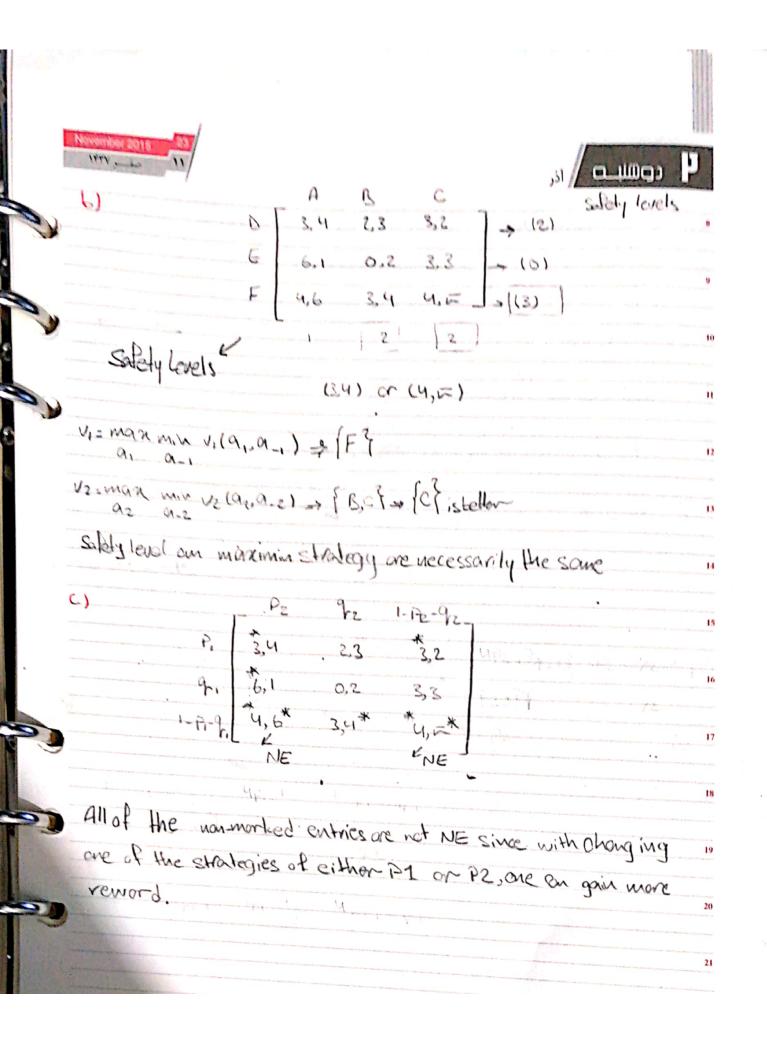
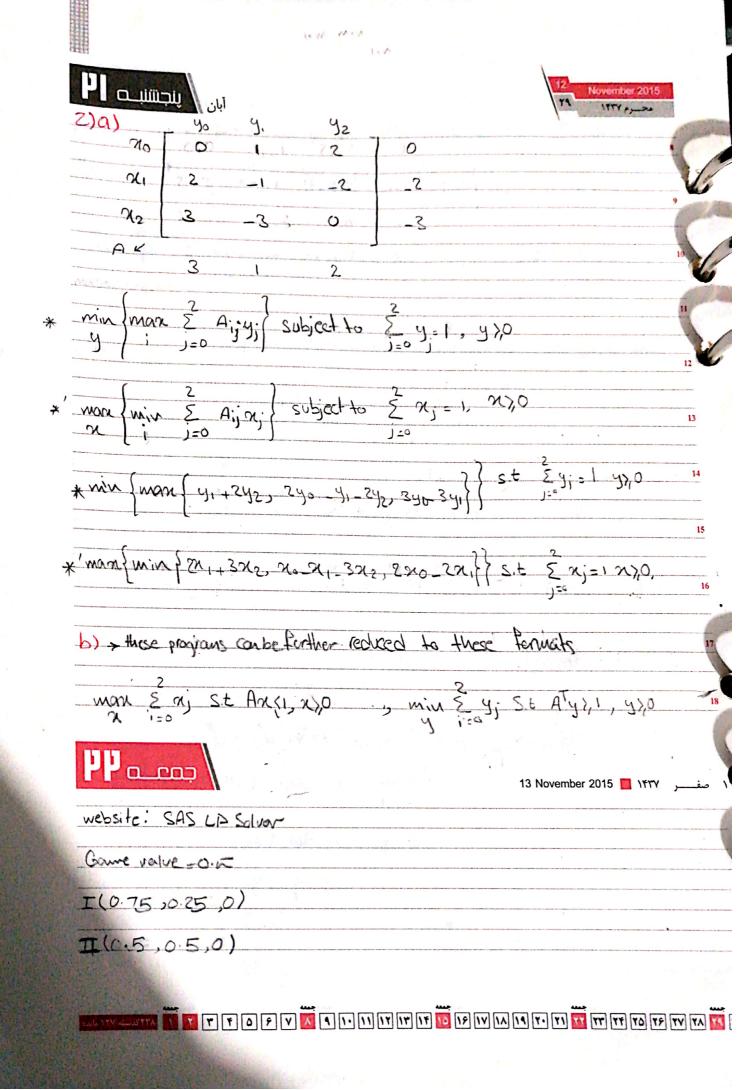
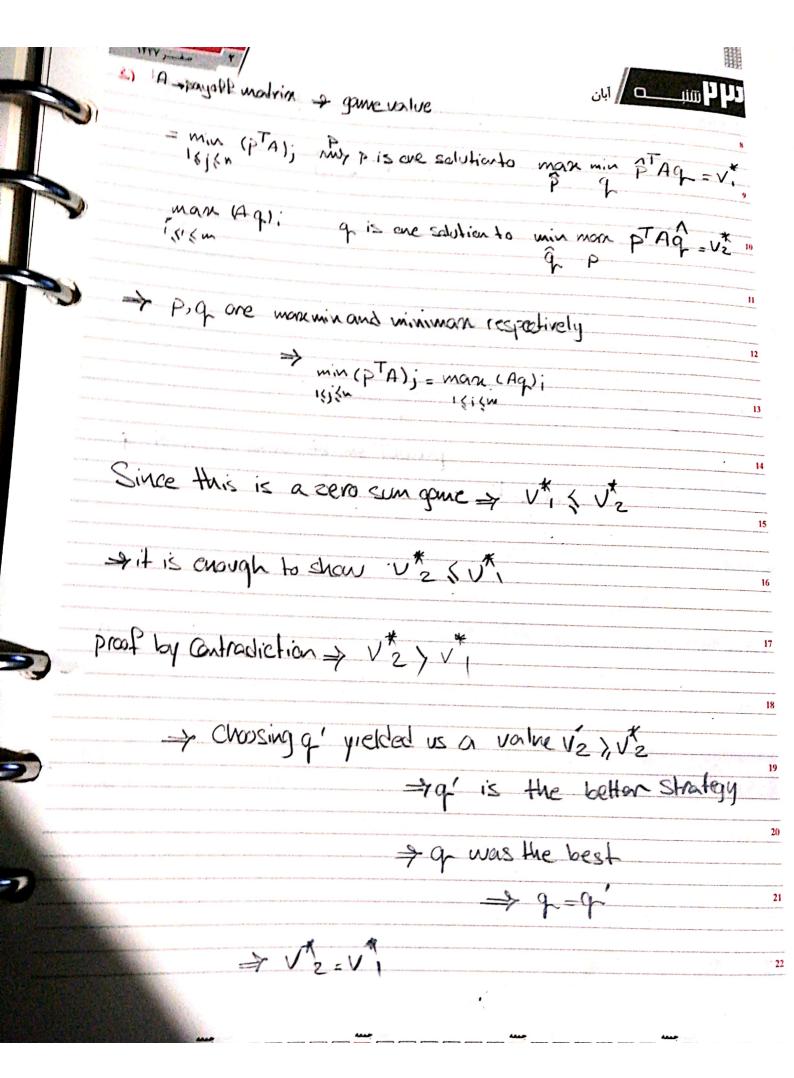
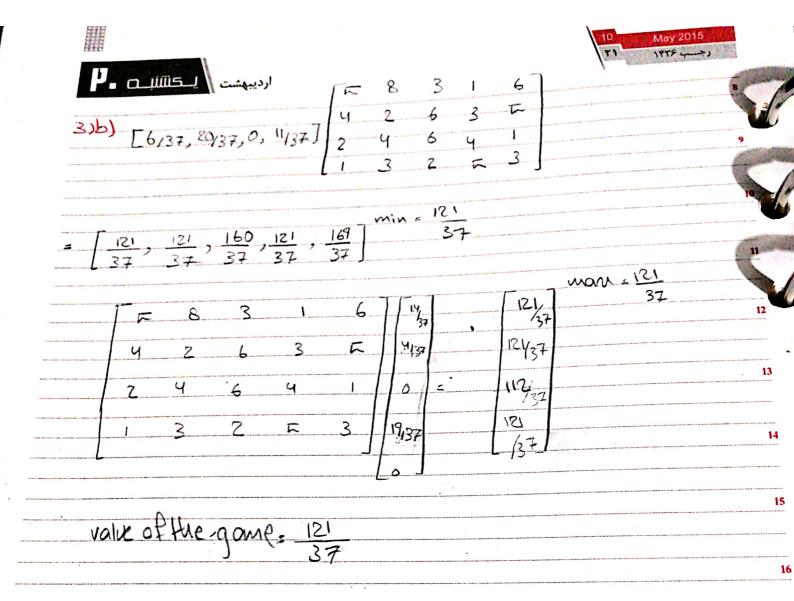
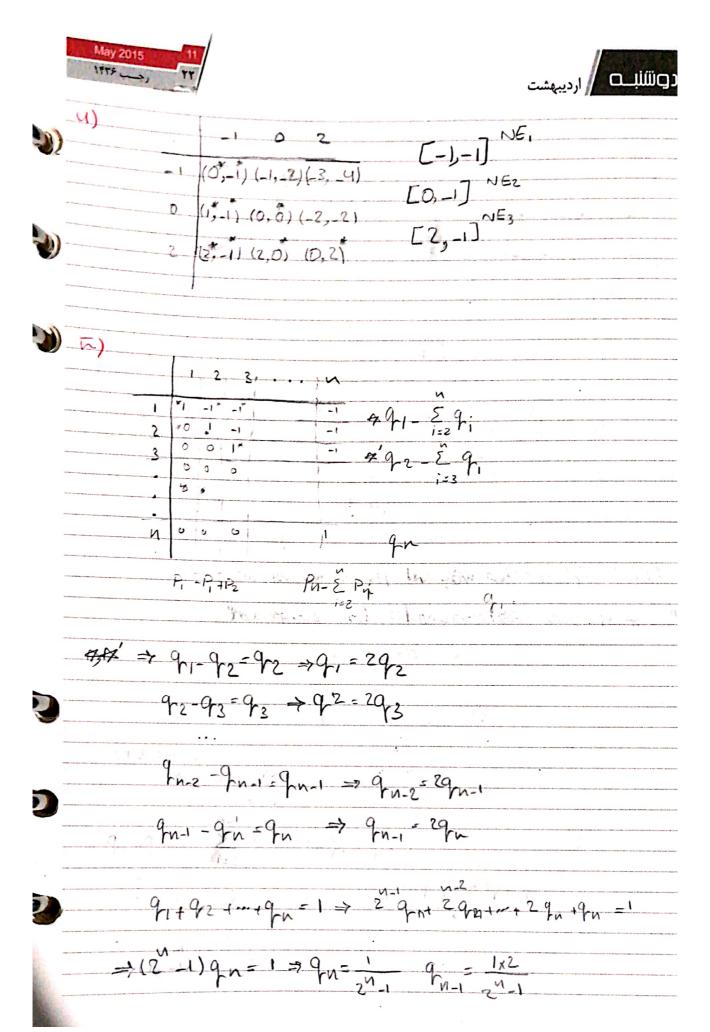
1)(1) $\frac{a}{b}$ $\frac{b}{3}$, $\frac{1-a-b}{5}$ $\frac{3}{5}$ $\frac{3$ best response Punction Bz (a-z) . {azin Az uz (az, a-z)), uz (a'z, a-z) for all a'zin Az {" $(a,b) \rightarrow (2((a,b),(\frac{1}{6},\frac{2}{3}))),(2(\frac{1}{6},\frac{2}{3}))$ any althor probability dist. sel of actions for p1 strategy profile 1 best response C = 1 +2 + 19 6 G= 1/2 + 4/3 + 2/3 = 1/2 $C = \frac{2}{3} + \frac{2}{3} + 1 = \frac{7}{3}$

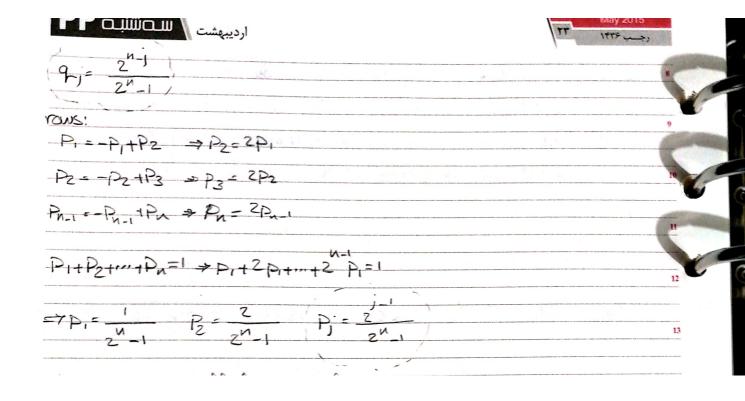




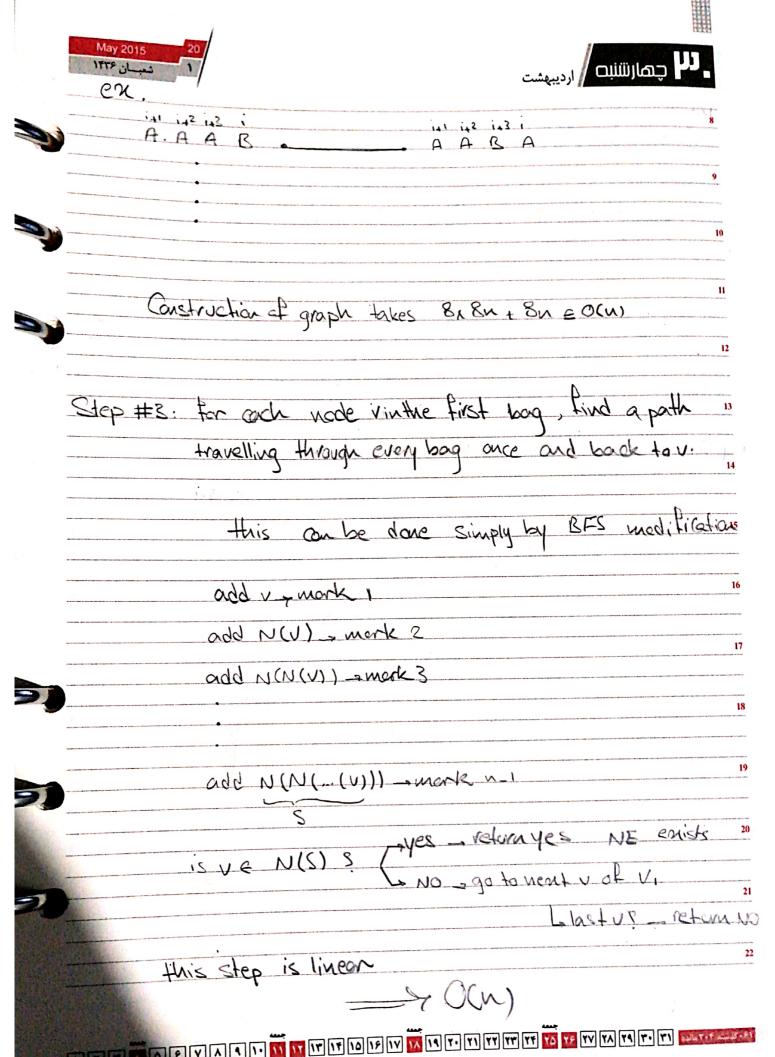








6.		
Step #1: for	r each player i, traverse through each it it 2 it 3 (modul	
players strated	gies and find the best strategy according to tuse i.e.	
each player	has the following table (first strategy is denoted by	1
	and spand by B)	
1+1 1+2 1+3	11	
A A A A A A	A1B	V
A B A	AIB this slop tankes BN	
B A A	AIB 13	3
B B A	A,B	pr.
B B B	A115	
Step #2:	Construct the following graph	15
*	for each playor i odd V; which consists of	16
	8 nodes Corresponding to each	17
	of the rows in player's #i	
	vespective table.	`18
	_ make a note in v; and viti adjacent i ff	
	the corresponding row in v; has myz under	
	it! it it it and Corresponding row in v;	-
		+1
	has myz under i i+1 i+2	ni mayelar
		-



why would this work ? if NE exists () Apprilhon returns yes > : NE exists > Some Strategy profile exists for n Assume the SP - P.P2P3...PnP, P2P3 for each 4 consecutive Letter in this profile P. P. A. Pitz Pitz Since it is NASH, player i best option with respect to players in its is ? best options is ?; exists as a vide in v; also for Pin Pitz Pitz Pitz exists as a node in vitt (Since player's it best option with respect to Pite Pitz Pita is Piti مــدمب سان ۱۴۲۶ 🍱 ۱۴۲۶ -> these two node are linked by definition > there enists a cycle from P, though Pi i=1 n to P,

May 2015 1875 July 19 Fran our Alg of there is a cycle	
passing through each bag back to first nack	8
-> there exists a strategy for player i	9
which is compatible for a strategy of plyor	11
=> Since strategies in the tables were the best	12
ones -> this yields a nanch.	13
	14
	15



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,	
7)a) if (i)j) = is an NE > och of the entries in the	8
corresponding row #1 hasto be less equal or.	
corresponding row # i housto be less equal or. Since each of the value are chosen randomly and independently	1
the probability of one entry to be less than x is on (values one e	[U;4])
=> there is not entries in #1 raw and not entries in #1 column.	marin de seems ou selle selle
-> each probability of raw's values of being (n -n each probability of Obmu's values of being (y = y	12
each probability of obmu's valves of being by = 4	13
-> (i,j) is an NE with probability on y	14
For the pure NE to not exist, in each of the a rows maximum	estimates for an agent of the
has to be any other n-1 valves other than marked ane	na managaran and and and and and and and and and a
	17
For each row, assume pair (11,4) has a mark a on	-
has not to be among marriagens of the coment row's	18
first values,	19
probability of droosing any other values in aroun	
than the marked one.	20
Since all of the probabilities are uniform, the chance of	21
marking some entry is I snot hitting - M-1	
) 1 1 1 1	22
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