Home work-3 on Reasoning with constraints

619m	DB OM OV 20 ACT OF THOMESE SHE TO THE HOUSE AND THE
	BEDING ADMOND DATE OF 1001 TO RESERVED DATE BODDED STORE
the dist	03 150 18 5/7 30 (8)2 -92 3/7 201 0 3/90/ MAD 101
	The all economics that contact the folice
	(300992: 099' ade 'a'g' a'm' a'x' ase agu ast pag pat
	bee, boa, dim, ear, eer, eff, ree, oaf
1:05	ALLES ENLEYED THE ENTERN WESTER LANGUES SELLS
vie:	The cross word problem is represented as nine studies with
	each source representing a variable each variable domain
	consists of every letter of the Alphabet That may potentially
	be ullised to build a woold from specified woold list
	considering cach square to be a slot mar con hold any
	letters of the airmabet However, not just only letter may
	go = no a slot; The letter must assist to constauct a word
	from me wood list when laxied with the letters in the
	ad:ising
	Ler's discuss on questions!-
	Domain consistency:
	The goal is here to ensure makine value assigned to a
	regional is compatible with the restrictions for example
	LI DO A TOO LOU IDING CILVING 115 II AFTULLE
	12 GOODE BE AGRICULTE FOOLS I'M CONTRACT OF
	e) Are consistency:- This assures mak for every value of one variable, mere is
	a compatible value in another was variable so mat no
	1 0 contraction
	constaninis are violated

Example: consider two neighboring squares A and B, with A to me lest of B. if A instudes the letter 'v' and no word in the word list begins with 'v' sollowed by any letters that B max accept, then assigning 'v' to A would render B inwasistable to such a circumstance, 'v' might be pounted from A's domain or certain values soon B, guarantering are unsistently

P) Adequency of Domain and Axi consistency.

Axe They sufficient? using Domain and Oxi consistency bedones

The number of alternative perfex assignments by xemoung

Those That will not lead to a solution. They do not, Hawren

Promise a complete answer consider Them Pitters That screen

out lexible selections but you may still need to investigate

The xemaining aftions

why? because, even if every shade (volicities) contains a valid

letter (value) and every paix at adjacent. Shades (variables)

adhere the wood restrictions (are consistency), the entire gold

may not include legitimate words everywhere. You are assume

that partians of the Puzzle are constant, but not complete the

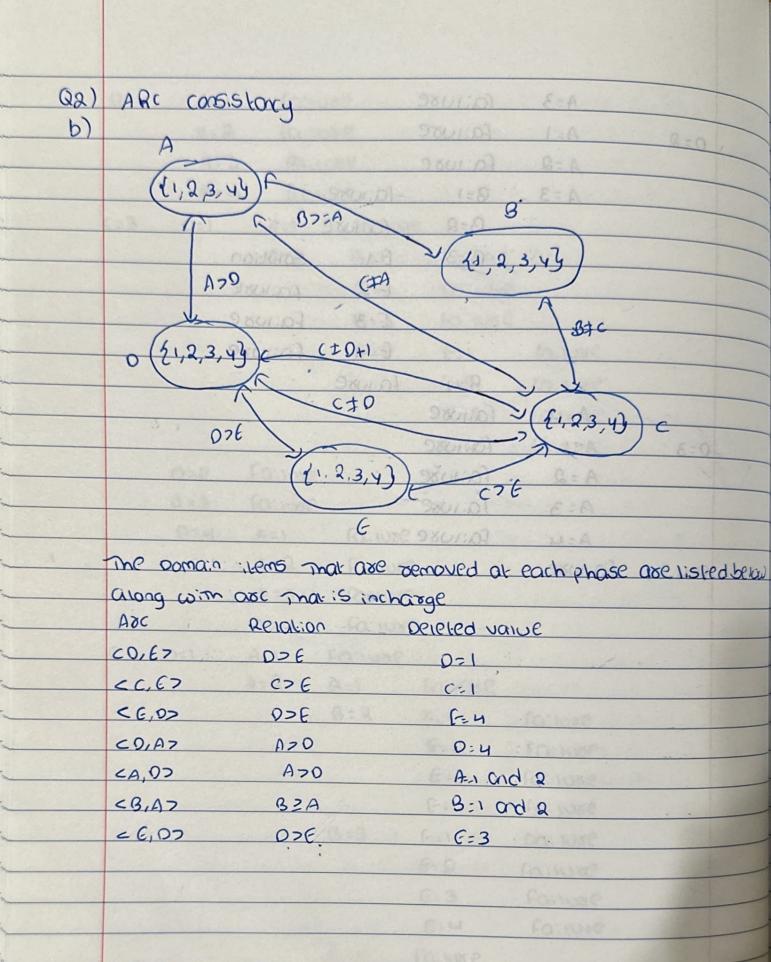
TO SUMMODISE, domain and ope consistency art as sieves, bemoving evident discoveracies, while work on evizie atthough deleting impossible possibilities makes it asiev, you may still need to by difform combinations of the bemaining officers

(18) consider a scheduling problem, where These are five activities to be scheduled in four time states. Suppose we represent the activity by the upsiables by the costables A.B.C. ande where The domain of each variable is of 1,8,3,4) and constant 080 A>0, 0>6, C\$A, C>E, C\$O, B = A, B\$C OND C\$Ot a) show how Back backing stone This problem? This solution looks like tree based on variable ordering C,O,A,B,G C=1 0:1 failuse 0=2 A=1 fa:108e A=2 fa:10de B=1 failuse B-2 POINOR B=3 f=1 failude E2 failure F=3 (0:108e E:4 fa:108C B=4 G=1 Fainve E2 FOINTE E-3 failure F:4 failubre A=4 B:1 failure 8=2 fa:100e B=3 souve B=4 E1 failude C. 2 FOILUXC F=3 Failuge 6:4 Failude

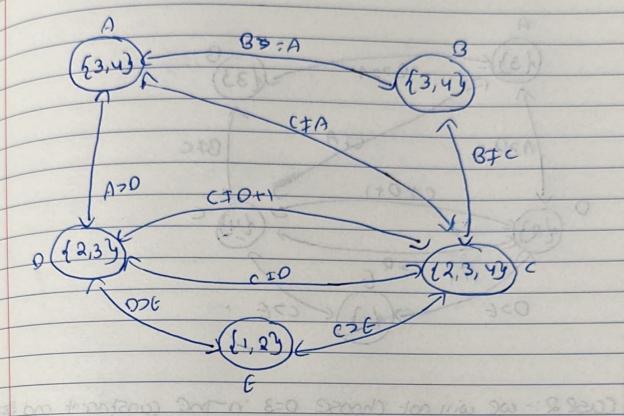
0:3	A=1	Pailuse	9414 /1	1.7			
	A = 8	a fa: iuxe					
	A	3 failure	4 9				
	A-L	1 B=1 FO	inve				
	8	B:2 FO	ive				
	90	. G:3 Fo:	nose				
	9	8:4 E	-1 Failur	e			
	9.	ero es	2 Fa:10	ve 98			
		E2.	3 Fa: 108	e			
		E _z	4	Saveror	2:00		
0:4	A=1	failure		Secretary	5:0		y y
	A=2	Fa; Nove	Samo	, A-	4.9		
	A:3	failure	DWA AT	2.6			
	A : 4	failure	900000	Exp			
C-2	0=1	failude	9377753	15-76-3			
	0=2	fairore	98618		# O 3		
	0:3		en r				
		A=2 - failu					
		A : 3 Fa: 102	se				
A:4	3=1	Fa:10de	19				
	3-2	failuble :	43				
	8:3	Fai wol	19 88				
	B:H	E-1 Solution					
		E: Q Failube					
		E=3 Failube				7.4	
		F:4 Failuxe	M: 14	10/0)	1		
0:4	A=1	failure					
	A=0	Failure			1		
	A=3	pailude					
	A = 4	failure					308

C=3	1:0	A-1	fain			
		A=2	S SUPPLEMENT		2:1086	No.
	994		3 - 8	2 (0	7,1086	
	e inge		B=3	3 fa	1108C	
(Silver	R Print	(1771) t	8:1	1 E	-1 fa: iun	e
				SM. G.	2 fa:10	98
Spen	100	Mosk b	Buch	E:	3 failur	se
		a, es	DECESSION	FI G	u failur	se
	(1 x m 1 m 1		3367 (0)	6.3	i de la companya de	
	0:2	failur	se	u p		
	0:3	factor	se	V.031	9000	10.6
	0:4	A=1	railo	e	Swit, att	
		A=2	faile	se	Soci By	6.4
		A:3	Fairus	96	25:1:6]	a d
	Box 1	A:4	Fair	96	367.5	11-17
(:4	1:0	A=1	ta: 1080		2MX2NIXXX	20
	6 (9 Eq. 19 ¹⁰)	A=Q	B=1	facilise	1-1-0	40
		ild organization	G:2	G=1'	sa:we	
			9517.5	E: Q	failube	
		25	9/2/7	E:3	Fairuse	
				G:4	Pailuse	
			B:3	61	fairuse	
				E=Q	failure	
	Marian .	ALL CONTRACTOR		E=3	Fairvoe	
					failuse	
			8:4	<u> Pariose</u>	12.20	
	Q =	3 fa:1	MRG		30,000	
	(A) (A) (A) (A)				500	是有句

 ned A:1 failure A=2 Fairoxe A=3 B=1 failuse B=2 failure 8:3 E1 Solution E-2 fairure F:3 fa:1000 F=4 fa: Note B=4 fanose A=4 Failuxe 0:3 A:1 Failuse A=2 Cairole 10 Marsh 100 M A=3 Fairose management of section as A=4 Fairose and A Property 0-4 fa:108e ON HER CERT SHIPPY ONE FINE DECEMBER OF SHORE BY HAVE BEEN and business out was some STATES SOLDED SETTINGS SALT FOREIGN DE LEGIS 1295 LD SN SNXLE 1295 905 905 50 545 900 SHARE DOWNEY SOT WAS TO WARMED THE T SIGN YOU DE O TO SCIENCE SUR TON BUT



mede is a stop to acc consistency



-) we need to take notice That are between cond o labelled Then 0:3 can be deleted by considering the abo < 0, d> -) we will spill the domain of 0, we have a cases 0: 2 and 3 case -1: Pulling 0:2 and owning consistency again values of Relation Removed ATC LG,07 0>6 F=2 1+0 10 C=2 CC,0> C = 0 60,00 C=3 C1:0+1 CA,(7 CIZA A=4 CB, C7 B1=C B=4

The ocsult will be problement that all some a BRA A20 B7C C+0+1 CIO DOG CDE case 2: - we will not choose 0=3 in me constoaint and Borker are consistory 3>= A A79 C+ 0+1 C+0 006 These are 2 constraints are The Solution