2020 Exam	
Set:	
W: warehouses wew	
Us austomers act	
D.ta	CEE.
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- Capaw: widget through out capacity per year of 4	varehousew. wew
· Costwic = trans portation cost from w to a per widger.	WGW
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constraints	
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Capawa Siric VWC	
	Set Whis warehouses we W O: customers cc-C Data * denande: demand per year of the cach customers Capaw: widget through out capacity per year of w Costwic: trans portation cost from who a per wydget. Variable: Wariable: Ware the amount of widgets from warehouse w to objective minimise cost. whin = E costwic x Twa. cac constraints ode need demands demands = E Twac Yce C.

(c)	
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Part B	My was the same
Set	W: warehouse well with giblions
	C: cristomoro, GEC
	Y: year YET IN
	L= /scation for rebuild REL.
Data 1	demanday: customer demand per year acc. yet accepancy: warehouse capacity per year. wow. yet.
PortA	Capacity: wavenouse capacity per year.
	tosts transport cost per widget from & to el
	rost: rebuilding cost per widget.
Ū.	rcost: rebuilding cost per widget. costwer than port cost widget from w to c per year
	COLCOSTO CONSTINUATION FACILITY COST LEL.
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	let. 76
Variode	eximor: the amount of widget from w to a per year.
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Variable	· Xw.c.y: the amount of widget from w to c per year. Y . So 13 Y : () if new facility is constructed at l lel
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Vooridde	exists the amount of widget from w to a per year. Te = [0,1] Te is 1. if new facility is constructed at l lel per year. Per = the amount of rebuild widget per year from customer to all le l
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Variable	Te: [0.1] Ye is 1. if new facility is constructed at e lell per year. Ex: the amount of rebuild widget per year from customer to cless le cec. lell for minimise cost of total building facility, widge rebuilding and transportation.
Variable	exists the amount of widget from w to a per year. Te = [0,1] Te is 1, if new facility is constructed at l lel per year. Per = the amount of rebuild widget per per from customer to all lel lel lel lel lel lel lel lel lel

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	Landra H. Mark Mark & Jay 185 miles	

	Question 2.	
art A	[[Xues (nove >)	1111
Mr. []	stage t = dice volls	1 A)
	The second of th	
	Deter 1	
	set c-color- CE fred blues	- a
	Data point	
	We = point with dice color	-34
	probabi	
	Puz probability that for getting point w with dice.	
	West in the second seco	es 200
	if c= red	
	$u=1$ if number is odd $P=\pm$	
	w=-1 it number is even P= 42	
-	if c=blue W=4 if number is 5, or 6. P= /3	
	$w = 4$ if number is 5. or 6. $P = \frac{1}{3}$ $w = -2$ u below 4. $P = \frac{2}{3}$.	1
	state: S: point having at the current stage	
	i: Color we will roll at the stage.	
	action = select dice	
	501001 0100	
	Value maximise probability of winning the game.	
	Know V50(3.i): if s>0, win (return 1)	
	if SEO, lose (returno)	
	Want Vo(0.i) red	
	0.5(++ (+1,9) + 0.5(+1/0)) + 0.5(+1/0)	(d)
	Valor accolor	
	blue.	1
	1-13 (# Vari (81492)) + 3(20 Vari	1
	VE(S.i) = max 0.5 x Vx+1 (Sx+1.a) +0.5 x Vx+1 (BOS-1,a) (V	ed)
	W - 11 (010 > 2011 CO	(ue.)

(a)	Submit py file:
CO	the probability for winning game is 0.687
(4)	submit py file: probusin game is if select red dree at first stage, the probability for winning game is 0.68% otherwise, 0.688. in the case of selecting blacking.
(h)	As a result of (a), we should select blue
	Mro at tirst.
	The state of the s
(9)	if in is -1, next color change from red to
	blue. It furt stran
	of frost stage of remain his 1 and
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