ilgad ————————————————————————————————————	Page No
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Nove Child	
Name: Shubham P. Bawalek	
Class: BEIT	
Roll. no: 04	
Subject: IS Lab	
DOP DOA marks	sign
/ / । जामतीयन भारतनाः ॥ \ १००	
999999	
	The second of the second
생물, 중에서 많이 그는 반에는 이 이동이 지나왔다. 시간이 있어 되고 있는 없는 것이 되는 것이 되고 하셨습니다.	

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CEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKG
Min Max with Alpha Beta for Tic
TOTAL TOTAL
Tac Toe:-
The and of The Top - Top is to be the
The goal of Tic-Tac-Toe is to be the first player to get there in a sow
tiset player to get there in a sun
or 2v2 delati
x" 1 2 2 5 fort
Players altornale plaining "xs" and "Os" on
Mayers altornalo placing xs anon
board until either
i) One player has three in a now
historia outropie o Ma or aliaconalla
horizontally, rostically or diagonally
ii) All nine squarec are filled.
66666
Programmer created in Winningstates' hame
f and
set containing a list of all possible
win conditions inside "proportion-py", if
playor places "xs" or "os" in any of t
list, they are declared winner.
The state of the s
The winning States are:
그리다는 사람들은 사람이 되는 것이 되었다. 그 사람들은 사람들은 사람들이 다른 사람들이 되었다.
ce; nning states = ([0,1,27, [3,4,57,[6,-
winning states = $([0,1,2],[3,4,5],[6,7]$ [0,3,6],[1,4,7],[2,5,8]
[0,4,8],[2,4,6])
Programmer has and tool a alimnic but
Programmer has exected a duminy bot which
The crame Board initializes the free gares
The crame Board initializes the free orgres
10 1-019. (21)1 of 100191.
Programmer also created a minmax bot which

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EKGCEKGCEK	CCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEKGCEK
	cree Min Max algorithm with Alpha Bera priving
	to decide the best move.
	The seal move
	The main py stade by initializations of two
	directs of Min Max Bot and During Bot.
	The coole than creates a variable judge
	which called TicTacToc Trudge, to which
	both objects are passed, the Tic TacToe sudge of
	deriolog the winner.
	The same of the sa
	- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-
	- Programmer also created a Helper method,
	Holper.py which gots the opponents position
	to bot and gots the available moves
	to play. Wimposts properties py mentioned earlie
	Input: -> No input from uger.
	CAS both the bots, Dunny Bot
	and Min MoxBot plang grame).
	Comment of the combant
	a) Bot one (MinMax Bot)
	b) Bot two (Dunny Bot)
	1) Draw (when all positions are
	filled with no winner).
	The winner is decided if the bot's
	position is in the set of list of
	Coinning States ().
24	

Date:

•	Analysis of claims by Programus that it
	crease MinMax with apple beta pring.
Þ	i) This claim comes from the Bestmanso
	method in MinMax Bot py one it cases recursion to find the next best move.
	recursion to find the next best move.
	ii) It starts by groffing the withword state and checks if the game already
	ended by comparing the winner
	variable with splfdar, self apparent or
	doga state and setuing 1 -1,0
	respectively.
	iii) The method then starts a for loop
	moves in the gameboard.
	iv) After every move, the Best move ()
	calls itself trecurringly to figure out
	next best move and appliate the Alpha
	Beta variables.
	v) The Bot than place the mant on
	best more and applates the Alpha
	vi) The Alpha, Buta variables are chroked
	with value and are code and
	The value and are applicated accordingly
	assigned to value & it its lower than Ros
	Bola's value is updated to value.
	This the claim by many is
	This, the claim ky programos that it asks Minney with alpha beta priving is correct.

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Occtput:						
3) (Bat one vi) Bot one					
	Tx',	'o' , 'x']	(°0'	'x' x		
		'O' Have	٠ 🗓	o' Hae		
		0'' x'	L'x'	. 0' '0'		
				1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
(3)	one to		vii) Draw			
7	11111	X	r'o'	'x', 'x']		
	10, X		1×1	'0' '0'		
	L'o' Mar	(1)	1721	'O', 'X'		
656	Bot two 66666 (Solvii) Bot one					
119		x, None	(Tio!,	'x', None		
(MC)	101		Hone	'X', 'D'		
	701		/ Mone,	'X' None		
		A CONTRACTOR AND A CONT				
j v)	Bot two		VIII) Botto	<u>e</u>		
1	(x)	×′, ×′	0/	X		
	'x','	01,01	None	× '0'		
	10	x','o'		D' Mono		
	ix Bot two					
y)	Bot one	- - -	[\o'\	X X		
	x','C		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	x','o'		
	and the second	(', None	L'X',	0 2 0 1		
	L'x', 'c	o', 'x']	x) Draw			
			The same of the sa	o' × 7		
2/7.7			10/1	0, ×		
H H		A SECURE OF THE PROPERTY OF THE PARTY OF THE		D' X'		