

	Experimen-	FO-10/1	Date :
		F &	
<i>Y</i>	Aim:-	prove the of statem	goal sentance from the tollowing set ents by Applying forward backward which interence Algorithm.
	Examplei-	As per of sell wear	chaining and Backward chaining: ne law, it a crime for an American to nos to Hostile nation country Nono is of America. Nono has some missile, and ssile, and all the missiles were sold to Robert, who is an American citizen.
	(1	Hostile of American (z) -> a	exercion into Fol. some for an american to sell weapons to notions. (x) A weapon (y) A sell (x,y,z) A Hostile eximinal (x) y of America is known as hostile. (x, America) -> Hostile(x)
		Nono Fremy Wono	is an enemy of America (Nono SAZ, America) ons some missile Nono, SAZ m1 missile (m)
	all land		



		Date :
	(5	All the missiles were sold to man by Pahend
		All the missiles were sold to mono by Robert Y missile (m) * Dwns (Nono & A13, m) - sell (Robert,
		7, Nono)
	,	
	(8)	Missile is a weapon
		Missile is a weapon missile (m1) - weapon (m1)
•		
1	(7)	Robert is American
		American (Robert)
		Forward chaining
		Armenica
		American (Robert) Missile(Ti) has (A.Ti) emerny (Nona,
-		
(·		Weopons(Ti) sell(Robert, Ti, Nono) Hostile(x)
		17400 poins (1911 SCH (1802 11, 11, 14010) [170541(8(X))
		criminal(Robert)
2		
	- =	



		Date :
	•	Backward chaining:
		"As perthe law it is a crime for an american to sell
		weapons to Hostile nation country Mono is on
5/3* 61		enemy of America. Nome has some missile, and all
F		the missiles were sold to NONO by Robert, who
		is American citizen prove that Robert is a
)		minal.
	S.	
		conversion of facts into Fol:-
		a. American (x) 1 weapon(y) 1 sells (x,y,z) 1
		hostile(z) -> criminal(x)
		-100 m (E)
		b. Enemy (Nono & Az. America)
/		c. Enemy (x, America) → Hostile (x)
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
-	9-	d. has (Nono SA), Ti)
		Missile (TI)
		e. has (Nono SA 3, TI)
		() nus (rivine (rij, riv)
. And	. //	f. YTI: Missile (TI) n has (Nono & A), TI) -> sell
		(Robert, TI, NADO)
	" 1	
	The second	9. Missile (II) -> weapon (II)



A STATE	1.			Date :
		American (F	lobert)	
		Co	iminal (Robert)	
			miliar (Rubert)	
		merican(x) Wear	pon(y) sells (Robert)	TI, a) Hostile(a)
		Missile(TI) Mi	ssile (TI) has (Nono	[A 3, TI] Enerry (x, America)
		Resolutions-		
		John likes all	kind of food	
		Apple and ve	retable are food	
		Anything anyo	ne earls are not	killed is food
		Anil eats peo	nuts and still al	ive
1	-	Horry eads	exercitying that	Anil eats
4 - 1	124	broke pil se	everything that 'To	no eats peanute
		apolij:- coure	rsion of facts into 1	Fol.
		a. 4x: food(x	J→likes (John, x)	
		b. food Cappl	-] n food (vege table)
			10 1 10	1/ 1 6 1/ 1
a skille	. 7	C. A(X) A(X)	: eat (or,y) n~ kil	$(x) \rightarrow topd(y)$
		d. eals (Apil.	peanuls) nalive (Anil)
20/				



		Date :
		e. $\forall x : eats (Apil, x) \longrightarrow eats (Harry, x)$
		$f. \forall x : \sim killed(x) \rightarrow alive(x)$
		$q. \forall x: \sim alive(x) \longrightarrow killed(x)$
		h. likes (70ho, peanuts)
		The mass (John, Promoto)
		step(2):- Eliminate all the implication and replace
		step(2):- Eliminate all the implication and replace
2		a. yx: food (a) v likes (John, x)
		h. food (apple) n food (vegetable)
<u> </u>		c. V(x) V(y): eat(x,y) A - killed(x) v food(y)
5		
		d. eats (Anil, pronuts) 1 alive (Anil)
		e. mix: tats (Anil, x) y cools (Harry, x)
	10 17 180	
		f. Vx:~ killed (x) v alive (x)
	1	
	-	9. ya: ~alke (x) v killed (x)
r fab. v.		h likes (John peopuls)



	CE-	Date :
	Page .	2-ii Negate the predicates on the left of implication
		q. 4x: ~food(x) v likes (John,x)
		b. food (x) n food (vegetable)
		c. A(x) A(x) ~ eats (x,x) ~ killed (x) r-tood(x)
		, (1)
		d. eats (Anil, peanuts) n alive (Anil)
		e. xx -eads (Anil, x) v eads (Harry, x)
		f. va ~ killed (a) v olive(a)
		q. 4x -olive (x) v killed (x)
		h likes (John, peanuts)
		O iii usa ala la la la Caracha le l
		2.111 use standard variable-for each predicate.
		a. 4x:~food(x) v likes (John,x)
rich (b. food (Apple) 1 - food (vegetables)
	* * * * * * * * * * * * * * * * * * * *	
		c yyz: -eats (x1z) v killed (y) v food (z)



	Date :
	d. eats (Anil, peanut) A glive (Anil)
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	g. 7x.~ alive(k) y killed(k) b. likes (John, peanut)
8	(JOBD, peanut)
	2 iv Eliminate all the quantitiers
	a.~food(a) v likes (John,a)
	b. tood (Apple)
	c. food (vegetables)
	d.~ eats (y,z) x killed (y) x food (z)
	e. eats (Anil, peanut)
	f. alive (April)
	g. ~ rods (Anil, W) y rods (Horry, W)
	b. killed (9) v alive (9)
	1. ~alive (k) ~~ killed (t)
	Jlikes (70hn, peanuts)



		Pate :
	step(31: Negote the statement to be ~like (John, peanut)	proved.
	~like (John, pegnul)	•
	step(4): protoco recolution graph	
	~ likes (John, peanuts) ~ foud(a)	ylikes (John,x)
	(and (amouts) ~ eats (x,z	peanols, or 3) v killed (y) v food(2 nut (z) 3
	~ eads (y, peanuts) v killed (y) eads (
	}	ADULY 4
		1/k3
	Ani	<u> </u>
	Falive (Anil) alive	(Anil)
	§ 3 Hence proved	
concl	usion Hence, we proved the goals for of	be back ward.
	forward and resolution inference	algorithm