K.G.C.E. Karjat - Raigad

Prolog Programming Assignment

Page No.:

	CE KGCE KGCE KGCE KGCE KGCE KGCE KGCE KG
	I How does the queries in kb.pl file are
	executed?
	-> Codes
	loves (vincent, mia).
	loves (marcellus, mia).
	loves (pumpkin honey-bunny).
	loves (honey-burny, pumpkin).
	Jealous (Doy) :-
	loves (x, z)
	loves (1972) ऐन भारवताः ॥
	(Due 11:0/2- James (x mis)
	Queny 1:0 ?- loves (x, mia). Output: X: vincent
J	x = marcellus
	I = marzenag
	Here as we know vincent loves mia
0	as well as marcellus loves mia. Thus
	the 1ch assumes that a is either vincent or marcellus
	vincent or marcellus
	Queny 2: ?- jealous (x,y)
	x = y, x = vincent
	Z= vincent
	y: marcellus
	2 = marcellus
	x=y,y=marcellus
	x = y, y = pumplin

K.	~	C	17
r.	Cr.	C.	·L.
Kari	at -	Ra	hapi

Page No.:	
Date :	

(GCE KGCE KG	DE KOCE K	SCE KOCE KOCE KOCE KOCE KOCE KOCE KOCE KO
		X= y, y= Honey-burny,
		As there is no fixed farometer in our query. The query will poduce output of every jealous (x,y) poir on our prolog code. The jealous () rule follows jealous (x,y):- loves (x,z), loves (y,z) Trivially, x & y both were associated to vincent, i.e., self-association. It then follows reflexive poperty for the rest of the prolog code.
	[2]	How does the queries in lists pl file one executed?
	->	Code: 4 4 4
•		Suffix (xs, ys):- Oppend (-, ys, xs). Prefix (xs, ys):- append (ys, -, xs).
		Sublist (xs, ys) :- Suffix (xs, zs) , [refix (zs, ys) .
		ทายน ([],[]). ทายน ([HITO], L):-

V		~	E.
L.	U		·L.
Kar	iat -	Ra	idad

Page No.:

Date:

KGCE KGCE KGCE K	GCE KGCE KGCE KGCE KGCE KGCE KGCE KGCE K
	noeu (TP, T),
	append (T, CHJ, L).
	Queny 1: ?- sublist ([a,b,c,d,e],[c,d]).
	Output: True
	A sublist procedure looks for a
	match between the first elements of
- G	the sublist 4 the main-list. Here,
	[c,d] is the sub-list of the main list [a,b,c,d,e]. As the main list contains
	the sublist [C, d], the output is true.
	Else, the output would have been false.
	0 (32 / 19 / 19 / 19 / 19 / 19 / 19 / 19 / 1
	Query 2: ?- Suffix ([a,b,c], Zs)
	Output: 25 = Ca, b, c7
	ZS: CCJ
6	ZS: CJ
	false
	Suffix in general eliminates the front
	elements from a list. Here, by using
	suffix procedure, [a,b,c] elements are
	removed from a 4 continues until all
	the elements one removed. As these
	one no more elements, in the list, the output will be displayed as 'false'
	ONITAL WILL DE CASTAGE às talse.

K.	G	·C	E.
Kari	at -	Ra	igad

Page No.:

E KGCE KGCE	KGCE KO	GCE KGCE KGCE KGCE KGCE KGCE KGCE KGCE K
	3]	Brogramming create a Prolog code to find factorial of a number?
	→	Cose. Techonal (O,1),
		tactorial (N.F):-
		N>0, N1 is N-1,
		factorial (NI, FI),
0		N is N*FI.
		NO AND BE
		Query: ?- factorial (3, W).
		Output: Wर श ज्ञानदीपेन भास्तताः ॥
		10/66666666
	4	In examples data set movies pl write
		query strings 4 results of query
		execution for any of 5 tasks:
@ —	0]	
		Beauty released?
		Query: ?- movie (american beauty, y)
		Output: 4: 1999
	PJ	Find the movies released in year 2000
	-	
		Query! ?- movie (M, 2000).
		Output: M= down-from-the mountain
	-	M= 0- brother-where art-thou
	-	

V			T
L.	U.	J.	E.
Kar	iat -	Ra	iaad

Page No.:

Date :

	M= ghost-world
	a) find movies released before 2000.
	Query: ?- movie (M,y), y < 2000 Output: M= american-beauty
	The state of the s
	y = 1999
	M= 0,2000 y= 1987
	M = bonton Infink
	4 = 1991
	19/30/9/9/9/9/9/1
-	dI Find the movies released after 1990
	Queny: ?-movie (M,y), y>1990
	Output: M= american-beauty
)——	y : 1999
	M= barton_fink
	y= 1991
	et find a director of a movie in which scarlett Johansson appeared.
	Queny: ? - address (M; Scarlett - Johansson)-
	director (M, O)
	Output: O= Peter_webber M= girl_with_a_pearl_earning

K.G.C	Page No.:					
Karjat - R	aigad Date :					
-	CE KGCE KGCE KGCE KGCE KGCE KGCE KGCE KG					
[5]	Draw a family tree of you/any					
	arbitrary family. Which has the tollowing					
	relations mother, father, daughter, son.					
	grandson, grandmother sibling, unde					
	person, male, female, You need to convert					
	it into KB & write atteast 6 queries					
	4 Onery results on your KB.					
	- July July 120					
D ->	0:					
	Diagram:					
A						
	Jack Helen Loliver Sophice					
	। ज्ञान शपन भारवता ॥					
	10/10/01/01/01/01/01/01					
	Ali Jess Lily James					
	Simon					
	1 Strient					
	fig: family Tree					
	Query 1: ? - mother-of (xiess)					
	output: x = helen					
	•					
	Query 2; ? parent of (x, simon					
	output: x = jess					
	Uarter, ve-Jess					

K.G. Karjat -			Page No.: Date:
		GCE KGCE KGCE KGCE KGCE KGCE KGCE	E KGCE KGCE KGCE KGCE KGCE KGCE KGC
	Query 3: Output:	?- Sister of X= jess	(x, lily).
	Query 4: Output:	?- Powent of x= lily	(x, harry).
		oc=james	
a	Query 5: Output:	?- aunt-of (x	(, simon).
	/	X= IIIS VA	(1) (2)
	Output:	?-grandfather- x-jarking meanin	of (x, harry)
	(9)		
	12		/*/
	/ 8		20/
@		(900) 5116	