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	Department of Intermation Technology
	Academic Year 2021-22
	Prolog Programing Assignment.
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	Class: - B.E.
	201120: -74
	Subject :- Is lam.
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	How does the quoies in kbplile are executed?
	the way that Y has X & fail is
	(ode : loves (uincent mia)
-	loves (marcellus, mia)
	loves (pumpkin, honey-bunny)
- 13 <sup>1</sup>	Choosey-bunny, pumpkin).
	jealous (x, Y):-:
	loves(x, x),
	loves (Y, Z)
	4 Gx -x1 x11 x1
	Query1: ?- loves (x, mia)
	Output: X = vincent
	X = Marcellus
	Explanation: Here as we know vincent loves mia as well as
	Marcellus loves mia. Thus we kb assumes
	that X is either Vincent or marcellus.
	That X is times in finitely the first of the
	Query 2: ?- jealous (x, r)
	Output: X= 1, X = vincent
	X = vincent
	- (1-) To Y = martellustanto - : 1 port
4	X = Marcellus
,	X = X, Y = Marcellus 7 · · · · · · · · · · · · ·
	X= Y, Y = pumpkin
	X=1/1, Y= Honey-bunny, my
	de la constant de la
1 -	Explaination :- As there is no fixed parameters in
	·
	emergy jealous (x, x) pair on our prolog code The
5	Tedlors (), dale tolloms.
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34	All the state of t

Jealous (xy): Loves (xz), loves (yz) initially X and Y both were associated to unicent, i.e. self-association. It then solves reflexive property for the rest of the prolog code.  2 How does the queries in list place executed?  Code: Sulfix (xs, ys):  append (-, ys, xs):  Append (Ys, -, xs).  Sublist (xs, ys):  Sublist (xs, ys):  Suffix (xs, ys):  Suffix (xs, ys):  Nxv ([], []).  Nxv ([], []).  Oxiv ([], []).  Queogl: -? Sublist ([a b, (cd, e], [cd]).  Culput: -True.  Explanation: A sublist procedure looks for a match betteren the first elements of the sublist and the monthst Hear, [c, o] is the sublist of the maintist [a, b, c, d, e]. As the main list contains the sublist [c, d], the autput is true. Fire the autput would have been false.		Date
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take.		the output is true Fise the output would have been
		talee.
	national designation of the	

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	Quan 0: 0: 0 h (r. 17 20)
:	Query 2: ?- Sullix ([a,b,c],25)
	Output :- Zs=(a,b,c)
	Z5= [b, i]
	ZS: [1]
	Zs = []
	fulse
	Explanation: Suffix in general eliminates the front
	elements from a list. Here, by using survive
-	[ [ ra, b, c] elements are removed from a and confined
	until all the elements are removed. As there are no
	more elements in the list, the output will be displayed
The state of the s	as false.
<b>M</b> .0	Programming create a prolog code to find factorial of
- Q·3	a number
	Д радирет
$\rightarrow$	Code: factorial (0, 1).
	factorial (N, F) ;-
	M>0,.
	NijsH-1,
	factorial (N, F1)
	Nis N*FI
Ģ.	
	Query: 2- factorial (3, w).
	Output 1- W=6
	, , , , , , , , , , , , , , , , , , , ,

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	Outo
Q. 4	and results of query execution for any of 5 tooks:
	and results of query execution for any of 5 tasks:
ه)	the state of the s
۷)	To which year was the movie - American Beauty released?
	· (Queent in ) =
3 .	·Query: ? - movie (amorican beauty, Y)
	Output Y= 1909
	and the sale of th
-	
D)	Find the movies released in year 2000
	The state of the s
	Query ?-movie (m. 2000)
Ť.	Output: M = down-from-the-mountain M= 0-brother-where-art-than
71	M= ghast-world
3	
(ک	Find mergies released before 2000
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	Query: - ?- movie (m,x), Y<2090
	Output : M= american- beauty
	Y= 1999
	m= anna
	X= 1987
-	Male in the second
	M = borton - Link $Y = 1991$
	12 (03)
·	
11	

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	Dale
	D 5 1 1 1000 5
	d) Find the movies released after 1990
3 11	
	Query: ?- movie (m, r), y> 1990
	Output :- M = amorican-beauty.
· ·	Y = 1999
	The state of the s
	M= barton-fink
	Y=19910 10 10 10 10 10 10 10 10 10 10 10 10 1
	d 5 1
v	e) Find # director of a movie in which scaleH
	Johansson append.
<u> </u>	and the second of the second discharge of the second d
3	Query: ?- actress (M. Scarlett-Johansoon)-director (M.D) D= peter-webber
<del>3</del>	m= girt - with- a- pearl - earring.
*	177- g 117 - 127 th = 0.2 pear = Eq 11111g.
0.5	Draw a family tree of youlary carbitary family.
<del></del>	which has the following reactions mother, father,
	daughter, son, grandson, grandmother, sibling, uncle,
	person male, female, You need to convert it into KO
	and write atleast 6 queries and Query results on your
	K-B
->	
,	Jack Helen Oliver Sophiee
	James
	Ali Ites   Lily
6	Simon
	Family Tace

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	Quenti: ?- mother- of (x, Jess)
	Output :- X= helen
r.	Query 2: ? parent of (x, simm)
	Output: - X = Jess
	Query 3: ?- Sister-Of (x, lily)
	Ocupat! X = jess
	Query 4: ? - parent of (x, hamy).
	Output! x= lily X= James
	Query 5: ? - aunt - of (x, simon)
	1 10 10 10 10 10 10 10 10 10 10 10 10 10
, 1	Output ! X = lify
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Query 6: 2 grand father - of (x, harry)
	Output: x= jack.
	nd .