	DATE:/_/	11
	11 1	
	Question	-
Y Week.		
	Write Some Sentences in FOL language	
	In a First-Order Logic (FOL) Knowledge	
	base System, Sentences are represented	
	Using a formal notation that	
-	includer Variables, Constants, Predicate	
	and quantifiers. Here are & Some	
	example Sentences in FOL.	
	- Administration of the second	
1-	All humans are mortal	
	Yx (Human (x) -> Mortal(x)	
2-	Socrates is a Human	
	Human (Socrates)	
	The state of the s	
3-	If Someone is a Parent, they are	
	also a grand parent	
	YX (Parent (x,y) -> Grandparent (x,y))	-
		•
4-	Mary is a Davent of John	
	Mary is a parent of John Parent (Mary, John)	
5-1	For Every Student, there exists a	and the second
-	teacher state of there exists a	
7	teacher who teaches them Vx 3y Teaches (y, x)	
	VAJJ leaches (9, x)	
0		<u> </u>
- 10	ome birds can Fly K (Bird(x) 1 (an Fly(x))	
	IX (Bird(x) / (an Fly(x))	

7- All triangles have three	Sides
7- All triangles have three HX (Triangles (X) -> Has sic	les (x,3)
. 8- Every marrial has a heart	
8- Every mamal has a heart Vx (Mamal (x) -> Has Heart	- (x))
9- All Prime numbers are po \(\forall \time (\time (\time (\time)) -> Positive (\time)	sitive
* X (Prime (x) -> Positive (x))
10- Some Fruits are red	
3x (Fruits (x) 1) Red (x))	
11- A bappy Person is happy if	they
have good friends \(\forall \text{X(Person(x)-)(Good Friends)}\)	
Yx (Person(x)-) (Good Friends	$(x) \longrightarrow Happy(x))$
	The state of the s
12- There are no married Sib Vx Vy (siblings (x, y) -> Mar	lings
Yx Yy (siblings(x,y)->Mai	ried (x, y))
13- Every even number is divis	ible by
2	
YX(Even(x) -> Divisible by (x) 2))
14- Come care are red and Fr	c 4.
14- Some cars are red and For 3x(car(x)) 1 Red(x) 1 For	ct(x1)
15 All books are written by	uithors
Yx (Book/x) -> 74 (Author &	f (yxx))
All books are written by a Yx (Book(x) -> Jy (Author &	f (y,x))
- Yx (Book(x) -> Jy (Author &	f (yxx))