Data Science &

AI

Artificial Intelligence

Logics

Lecture 01

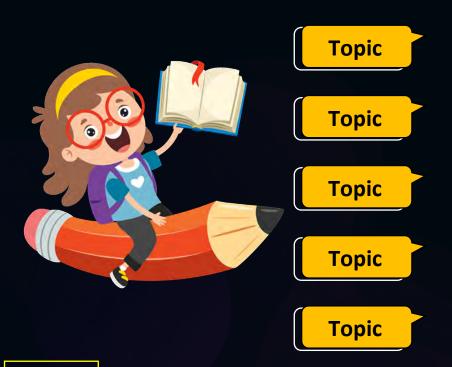


Recap of Previous Lecture









Topics to be Covered









Topic

Propositional Logic

Topic

predicate logic

Topic

Topic

Topic

- 1 Propositional 10sic
- 2 Paedicate logic

Proposition logic

- 1) Atomic logic -> A single statement which can be represented in a term of True
- (2) Compound logic -) multiple statement combinsly stuing us true or False is called as

 compound logic

T, F

if we are attendion all the casts then we can clear hate DA Exam => T, F

T -) + autology F -) Contradiction

logical connective

O AND -> 1 conjuction ->

A	B	0
T	T	T (22)
F	7	5
F	F	F
T	F	F

AKASH is Prepassing For GATE AMO Job

A > Akash is preparing For GATE -> T, F

B -> AKash is Preparling for Job -> T, F

(ANB) => F

(2)	OR -	S V	\rightarrow	Dsjunction	\rightarrow
	011			7,33	/

- (1) HEASY IS DESDESSIONED FOR CHALE ON 70P.
 - 1 Akash is preparing For Chate -> T/F
 - By Narash is Preparation For Job -> TIF

(ROBERT) AUB-) T

1) AKASh is Prepagning For Job =>A 3) Negation > ~ > = > - Ukash is mot brebasing too Jop T F (2')-22
F T (~A) TA) if you are preparing For GPTE Then you will be able to (rack N->B

Biconditional - you will able to Get 117 if and only if you will score more man

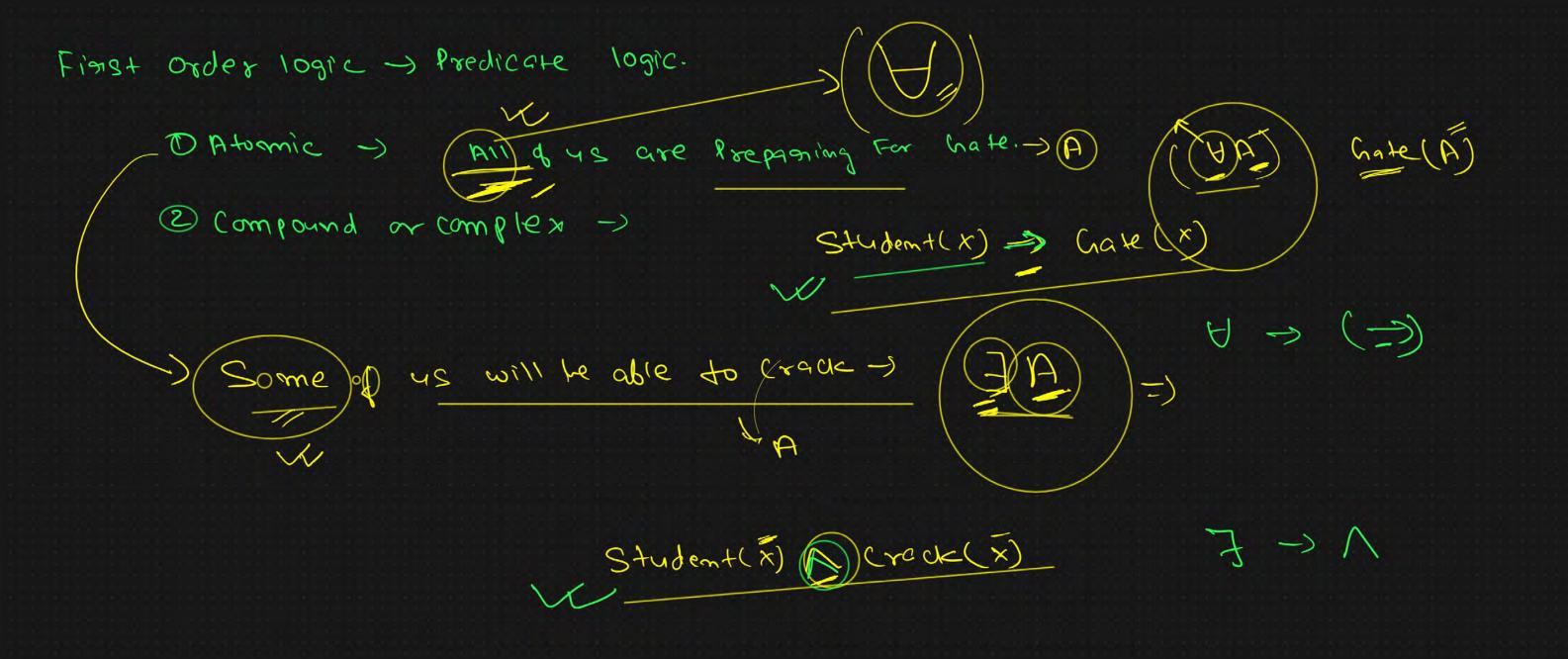
 $(P \subseteq P)$

implication table ->

()	B	0 (B-) B)
T	T	
F	Ţ	T
7	<i>F</i> -	<u> </u>
F	F-	

Bicanditional Table ->

A	В	0(((=>))
7	T	
T	F	F
F	7	
F	F	



Compound Sentenge Example

All of us are preparing For GATE but some of us will be able to crack

(YA)

(3B)

?		edels are there for	The sentence A V	8) 2) = 0(8) X	
n'	B	-13		O (AOTBOC)	=>(7)
+		F	7	-	
T		F	F-	T	
7		T	T		
T		F			
F		-	E		
F		1	<i> </i> -	FX	
E		- TF	F		
+) =		



2 mins Summary



Topic

Topic

Topic

Topic

Topic



THANK - YOU