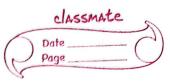
123	Date Page
23 9 23	AI - Assignment -3
* 3	
	Title: Etudy of Prolog Programming Language
Aim:	Personstrate Reasoning / Frontsacing using Protos
Theory	Prolog
-	Prolog is a high tevel programming language used for symbolic seasoning and astificial intelligence.
	intelligence in symbolic seasoning and astificial
$\rightarrow$	Stands for "Programming is logi." . It is often
-	und for tacks broking symbolic manipulat.
	Stands for "Programming in logic". It is often und for takes involving symbolic manipulations
G T	Symbolie language:
	It is a type of language that uses symbols often abstract sepresentations, to convey meaning:
1	
	This symbols can squeent various concepts.
	natural language like English which were words
1	natural language like English which were words and grammal to convey meaning.
<u> </u>	Rules, Fouth and Pueles
	Facts: They are simply stationist that declare
	something to be the In protog fact an
	Facts: They are simple statement that declare something to be true. In prolog facts are suppliedly used to segressent basis knowledge

	Page
	Muly: They are logical statements that  Speinty scletionships or conditions. They are  used to derive new information based on
	existing facts and rules.
	Quesies: They are questions of sequests for saformation that you are the pology system of anxious. Quesies are protog system to anxious.  They are posed to find one if a particular
JFAB (	or available facts and Rules.  Why Pastog 7
-7	To provide programing language and environment for thinking and logic to seach informed judgment; back on available knowledge.
<b>-&gt;</b>	fedoning can take various forms, induding deductive, industive, and abdustive and analogical sectioning.
2.8	Explain som inferen technique is propositional logic and predicate logic.
<i>→</i>	PROPOSITIONAL LOGIC
₽.	Modus Pomens (mp): If you have a conditional statement and the anticedents is true

	you can infer the consequent.
	P- 9 ; P is true so 9 moust be
B.	Moches Tollers (mt): If you have a condition
3	startment and its consequent is true false you can infer the negation of the antecendent
-0	p -> q ; = ~ ng is tem so ~ p ; s teme
>	PREDICATE LOGIC
, A1	Universed Instantiation: (UI) if you have a universally quantified statement, you can seplace the variable with a specific teem.
Autorities and the second seco	om sperific term 'a'.
Q.	Universally quantified statement
	From 'P(a)', you can inject + 2P(2).
3.4	What are some applications of peolog
<b>**</b>	At sescoul and applications, including expert  systems, knowledge based systems and natural
	language processing. It is used to sepseent



	and manipulate knowledge and bules, makings it valuable for AI tasks like automated seasoning and decision making.
A STATE OF THE PARTY OF THE PAR	Expect Systems: They are computer playcons that mini the decision making ability of human experts is specific domains.
	Natural language processing: Pastog is used in NLP applications for passing and processing natural language, building chatbots, and performing language understanding tasks.
	Robotics: Perlog can be used in the educations
• 1773	Secsoring to teach logical scaroning, problem  Solving and programming concepts. It can be  when to model and contest hostory. Especially  is applications that involves logical decisions  making and planning.
	Conduction: Thus we learnt about Photog language and demonstrated scaroning and informe using Peolog.
	The state of the s
No. Accept	