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INSTITUTE OF INFORMATION TECHNOLOGY
ADDING VALUE TO ENGINEERING

Department of Computer Engineering

Academic Year: 2020-21

SUBJECT:

CLASS: Second Year Engineering. SEMESTER: IV

ASSIGNMENT NO.: OCW. DATE OF SUBMISSION: 21st June, 2021.

NAME OF STUDENT: Kaustubh Shrikant Kabra.

TOPIC: Logic Programming : Prolog. ROLL NO.: 34, Teams-20.

WEBSITE URL REFERRED: https://www.youtube.com/watch?v=jySpg72Vbc4

Summary/Abstract/Review:

Prolog is a logic programming language. It has important role in Artificial Intelligence. Unlike many other programming languages, Prolog is intended primarily as a declarative programming language. In prolog, logic expressed as relations. Core heart of prolog lies at the logic being applied. Formulation or computation is carried out by running a query over these relations.

Key Features:

1. Unification - The basic idea is, can the given terms be made to represent the same structure.

2. Backtracking - When a task fails, prolog traces backwards and tries to satisfy previous task.

3. Recursion - Recursion is the basic for any search in program.

Advantages :-

1. Easy to build database. Doesn't need a lot programming effort.
2. Pattern matching is easy. Search is recursion based.
3. It has build in list handling. Makes it easier to play with any algorithm involving lists.

Disadvantages :-

1. LISP dominates over prolog with respect to I/O features.
2. Sometimes input and output is not that easy.

Application :-

Prolog is highly used artificial intelligence (AI). Prolog is also used for pattern matching over natural language parse trees.

Conclusion:

Therefore, we have studied and work with logic programming language : Prolog.

Name & Sign of Subject In-charge:	**Marks:**	
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