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| **AY -ODD 2024-25** | | | | | | | | | | | | | |
| **GUJARAT TECHNOLOGICAL UNIVERSITY** | | | | | | | | | | | | | |
| **SCHOOL OF ENGINEERING AND TECHNOLOGY** | | | | | | | | | | | | | |
| **PRACTICAL - 9** | | | | | | | | | | | | | |
| **Course Code & Name** | | | **ME01095021- Artificial Intelligence** | | | | | | | | | | |
| **Academic Term:** | | | **AY –ODD 2024-25** | | | | | **Semester** | | | | **I** | |
| **Student Enrollment No:** | | | **241370795004** | | | | | **Batch:** | | | |  | |
| **Student Name:** | | | **Dake Darsh Dhaneshkumar** | | | | | | | | | | |
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| **AIM/Objective:** | | | | | | | | | | | | | |
| 1 | | For given English statements write a prolog program.  - Facts & Rules  (1) Jharna is a woman.  (2) Jayesh is a man.  (3) Jayesh is healthy.  (4) Jharna is healthy.  (5) Jayesh is wealthy.  (6) anyone is a traveler if he is healthy and wealthy.  (7) anyone can travel if he is a traveler.  - Goals.  (1) Who can travel?  (2) Who is healthy and wealthy? | | | | | | | | | | | |
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| **Expected Outcome:** | | | | | | | | | | **CO/PO/PSO** | | | |
| 1 | | Analyze the working methodology of different learning approaches. | | | | | | | | CO3 | | | |
|  | | **Experiment Result and Analysis**  **Resources and Software used:**   1. SWI-Prolog   **Code:**  % Facts  woman(jharna).  man(jayesh).  healthy(jayesh).  healthy(jharna).  wealthy(jayesh).  % Rules  traveler(X) :- healthy(X), wealthy(X). % A person is a traveler if they are healthy and wealthy.  can\_travel(X) :- traveler(X). % A person can travel if they are a traveler.  % Goals  % (1) Who can travel?  % ?- can\_travel(X).  % (2) Who is healthy and wealthy?  % ?- healthy(X), wealthy(X).  **Output:** | | | | | | | |  | | |  |
|  | | |  |  | | --- | --- | | **Conclusion** | | | 1 | This Prolog practical effectively models real-world reasoning using facts and rules to derive logical conclusions. By defining relationships such as health, wealth, and travel eligibility, the program demonstrates how Prolog's declarative nature can be used to answer queries like "Who can travel?" and "Who is healthy and wealthy?". | | | | | | | | | | | | |
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| **Evaluation Rubrics** | | | | | **Marks** | | **Inadequate** | | **Good** | | **Excellent** | | |
| **0%** | | **50%** | | **100%** | | |
| 1 | The understanding of the Student regarding the objective of the given practical | | | | **2** | |  | |  | |  | | |
| 2 | Installation of Software or Hardware Setup level | | | | **2** | |  | |  | |  | | |
| 3 | Quality of the Analysis done | | | | **2** | |  | |  | |  | | |
| 4 | Quality of the report including concluding remarks and Findings | | | | **2** | |  | |  | |  | | |
| 5 | Question & Answer related to given practical & timely submission | | | | **2** | |  | |  | |  | | |
|  | | | | | **10** | |  | |  | |  | | |
| **Total Marks Obtained Out of 10** | | | | | | |  | | | | | | |
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|  | | **Date of Completion:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | |  | | **Course**  **Coordinator Sign:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | | |