

Artificial Intelligence V Sem B.Tech (Computer Sc & Engg) 2023

1. Write a program to implement water jug problem
2. Write a program to conduct heuristic search
3. Write a program to implement A\* algorithm
4. Write a program to implement search problem of 3x3 puzzle
5. Write a program to construct Bayesian network from data.
6. Write a program to infer from Bayesian network
7. Write a program to implement production system
8. Write a program to perform operations on fuzzy sets.
9. Implement a case study on constraint Satisfaction problem
10. Write a program to implement perceptron model.
11. Write a case study to show reinforcement learning

**Course Outcomes:**

**Expected experiments to be performed (Not limited to):**

**Using the Python Libraries for Artificial Intelligence**

1. AIMA-Python
2. PyDatalog
3. Simple
4. Easy

Write programs based on the following:

1. Graph search algorithms
2. Adversarial search
3. Knowledge representation
4. Logical inference
5. Probability theory
6. Bayesian networks
7. Markov models
8. Constraint satisfaction
9. Machine learning
10. Reinforcement learning
11. Neural networks
12. Natural language processing