



LJ Polytechnic

Certificate

*This is to certified that a bonafide record of practical work done by
Mr./Ms. _____ be
aring a Roll No. _____ in Semester _____ of
_____ Branch in the
_____ laboratory during the academic
year _____ under our supervision.*

Subject In-Charge

Head of the Department

Index

Roll No.: _____ Student Name: _____

Subject: Fundamentals of AI

Semester: _____

Sr. No.	Experiment / Exercise Name	Grade/ Mark	Submission Date	Remarks/ Sign
1	Write a program to implement Tic-Tac-Toe game problem.			
2	Write a program to implement BFS (Water Jug problem or any AI search problem).			
3	Write a program to solve Missionaries and Cannibals problem.			
4	Write a program to implement DFS.			
5	Write a program to solve Hill Climbing problem.			
6	Write a program to implement Single Player Game (Using Heuristic Function).			
7	Write a program to implement A* algorithm.			
8	Write a program to solve Tower of Hanoi problem.			
9	Write a program to solve N-Queens problem.			
10	Write a program to solve 8-puzzle problem.			
11	Write a program to solve travelling salesman problem.			
12	Explore the NumPy, Pandas library and implement various operations. <ul style="list-style-type: none">Data Processing using various statistical technique (Numpy library)			

	<ul style="list-style-type: none"> Preparing data using data frame and apply statistical techniques (Pandas library) 			
13	<p>Explore the Matplotlib library and implement various visualization based operations.</p> <ul style="list-style-type: none"> Bar plot Scatter plot Pie plot 			
14	<p>Choose any one dataset from Kaggle and implement preprocessing tasks.</p> <ul style="list-style-type: none"> Data profiling Data cleansing Data reduction Data transformation Data enrichment Data validation 			
15	<p>Implement data pre-processing and data visualization on built-in dataset from Scikit-learn and implement simple Machine Learning algorithm.</p>			