

2- before going to play, one should study the weather. Draw a decision tree for “Play?”

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3- frames are one of data mining techniques.

- i. define what are Frames
- ii. state advantages and disadvantages of frames
- iii. draw a frame for Vacation.

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Chapter 11: Expert System

- 1- The first success of AI was expert systems.
 - i. Define expert system according to Pigford & Braur
 - ii. Draw Components of an Expert System
 - iii. List Expert System Development Steps

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- 2- list the five Categories of knowledge

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3- draw a Semantic Network for “Sam owns a green Honda”

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4- draw a Semantic Network for “Sam gives a book to Mary”

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5- what are problems of Semantic Network

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Chapter 12, 13: robotics and image processing

1- list five of purposes of robots

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2-draw the relation between Image Processing Operations

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3- list five Convolution Masks

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Chapter 14, 15: learning and neural networks

1- In neural networks,

- i. what is linearly separable problem, using AND and OR gates?
- ii. what is back-propagation?
- iii. compare Supervised Learning and Unsupervised Learning

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2- define XOR problem, and show how it can be solved using MLP neural network.

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3- Draw the structure of learning agent

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4- Draw Flow chart of machine learning for pattern recognition.

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