

Assignment 5

- 1a. What are feature mapping models? Write SOM algorithm.
- b. Write the properties of crisp sets.
- 2a. Explain the properties of the feature map.
- b. Define a fuzzy set. How is it different from a crisp set?
- 3a. Explain the processes involved in the formation of a feature map.
- b. Write the properties of fuzzy sets.
- 4a. Explain the basic fuzzy set operations.
- b. What is partition and covering of a set? Give an example for each.
- 5a. Explain learning vector quantization.
- b. Given the following car models, classify them into three fuzzy sets low cost, medium cost and high cost cars. Illustrate the fuzzy sets using appropriate fuzzy membership function graphs.
Car Models: Ford Figo, Maruti 800, Audi, Tata Nano, Honda City, Volkswagen Vento, BMW, Mahindra Scorpio