

**Sarvajani College of Engineering & Technology**  
**Information Technology Department**  
**Data Mining & Business Intelligence (2170715)**

List of Practicals

<b>Practical No.</b>	<b>Description</b>
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| 1. | Study the following data mining applications and make a detailed note on them. <ul style="list-style-type: none"><li>i) Web Mining</li><li>ii) Text Mining</li><li>iii) Mining Time-Series Data</li><li>iv) Social Network Mining</li></ul> |
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| 2. | Implement routines to normalize the data in the sample data file using : <ul style="list-style-type: none"><li>i) min-max normalization<ul style="list-style-type: none"><li>a) Map to range [0,1]</li><li>b) Map to range [-1,1]</li></ul></li><li>ii) z-score normalization and</li><li>iii) decimal scaled normalization</li></ul> |
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Sample DataSet :

10, 12, 3, 6, 5, 25, 17, 100, 1000, 98, 11, 27, 78, 33, 9, 18, 23, 44, 690, 200

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| 3. | Implement Binning methods for data smoothing in following dataset using bin depth of 3. Demonstrate (i) smoothing by bin means, (ii) smoothing by bin medians (iii) bin boundaries. |
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Sample Dataset:

13, 15, 16, 16, 19, 20, 20, 21, 22, 22, 25, 25, 25, 25, 30, 33, 33, 35, 5, 35, 35, 36, 40, 45, 46, 52, 70

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| 4. | Study and implement the k-means clustering algorithm over the given dataset. |
| 5. | Build a naive Bayesian Classifier for the Playtennis dataset.                |
| 6. | Generate a Decision Tree Classifier for the Playtennis dataset.              |
| 7. | Study and implement the Apriori algorithm over the given dataset.            |