**SAVEETHA SCHOOL OF ENGINEERING**

**SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES**

**COMPUTER SCIENCE AND ENGINEERING**

**CSA1654-DATAWAREHOUSING AND DATA MINING FOR MEDICAL APPLICATIONS**

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|  | **LIST OF EXPERIMENTS** |
|  | **ETL AND OLAP OPERATION USING KNIME DATA ANALYTICS PLATFORM.**  **ETL operations.png** |
|  | **PREDICTION ANALYSIS USING LINEAR REGRESSION THROUGH R TOOL.**  **Linear Regression.CSA1668..png** |
|  | **PLOTTING GRAPHS USING R TOOL.**  **Box plot:**  **Boxplot.CSA1668.png** |
|  | **CENTRAL TENDENCY AND DATA DISPERSION MEASURES USING R-TOOL.**  **Mean Median Mode**  **Mean using r tool.CSA1668.pngMedian using r tool.CSA1668.pngMode using r tool.CSA1668.png**  **Range Inter Quartile Range**  **Range using r tool.CSA1668.pngiqr.png** |
|  | **PERFORM CORRECTION ANALYSIS AND NORMALIZATION.**  **1.png2.png**  **Normalization**  **Output:**  **normalization.png** |
|  | **REGRESSION ANALYSIS USING R TOOL.**  **regression analysis.png** |
|  | **DATA PREPROCESSING AND PREPARATION FOR KNOWLEDGE ANALYSIS USING WEKA.** |
|  | **K-MEANS CLUSTER ANALYSIS USING WEKA.** |
|  | **DATA ANALYSIS BY EXPECTATION MAXIMISATION ALGORITHM USING WEKA.** |
|  | **DATA ANALYSIS BY COBWEB-HIERARCHAL CLUSTERING ALGORITHM USING WEKA.** |
|  | **KNOWLEDGE MINING USING ASSOCIATION RULE USING WEKA.** |
|  | **FP GROWTH ALGORITHM USING WEKA.** |
|  | **PREDICTION OF CATEGORICAL DATA USING DECISION TREE ALGORITHM USING WEKA.** |
|  | **PREDICTION OF CATEGORICAL DATA USING SMO ALGORITHM USING WEKA.** |
|  | **EVALUATING THE ACCURACY OF THE CLASSIFIERS USING WEKA** |
|  | **DATA VISUALIZATION TECHNIQUES USING KNIME DATA ANALYTICS PLATFORM.**  **Box plot Histogram**  **box plot.pnghistogram.png**  **Scatter Plot**  **scatter plot.png** |
|  | **PREDICTION OF CATEGORICAL DATA USING BAYESIAN ALGORITHM USING WEKA.** |
|  | **DATA ANALYSIS BY DENSITY BASED CLUSTERING ALGORITHM USING WEKA.** |
|  | **CREATE A BOXPLOT GRAPH FOR THE RELATION BETWEEN "MPG"(MILES PER GALLOON) AND "CYL"(NUMBER OF CYLINDERS) FOR THE DATASET "MTCARS" AVAILABLE IN R ENVIRONMENT**  **Box plot:**  **mpg.png** |
|  | **GIVING THE FOLLOWING DATABASE WITH 5 TRANSACTIONS AND A MINIMUM SUPPORT THRESHOLD OF 60% AND A MINIMUM CONFIDENCE THRESHOLD OF 80%, FIND ALL FREQUENT ITEMSETS USING (A) APRIORI AND (B) FP-GROWTH.** |
|  | **THE 'DATABASE' BELOW HAS NINE TRANSACTIONS. WHAT ASSOCIATION RULES CAN BE FOUND IN THIS SET, IF THE**  **MINIMUM SUPPORT (I.E COVERAGE) IS 60% AND THE MINIMUM CONFIDENCE (I.E. ACCURACY) IS 80% ?**  **TRANS\_ID ITEMLIST** |
|  | **USING R PROGRAM MAKE A HISTOGRAM FOR THE “AIRPASSENGERS “DATASET, START AT 100 ON THE X-AXIS, AND FROM VALUES 200 TO 700, MAKE THE BINS 150 WIDE** |
|  | **USING R PROGRAM CREATE A 3D PIE CHART FOR THE DATASET “POLITICAL KNOWLEDGE” WITH SUITABLE LABELS AND COLOURS.** |
|  | **OBTAIN MULTIPLE LINES IN LINE CHART USING A SINGLE PLOT FUNCTION IN R.USE ATTRIBUTES“MPG”AND“QSEC”OF THE DATASET “MTCARS”** |
|  | **USING R PROGRAM MAKE A HISTOGRAM FOR THE “TOOTHGROWTH”DATASET, START AT 100 ON THE X-AXIS, AND FROM VALUES 200 TO 700, MAKE THE BINS 150 WIDE** |