

## SNS COLLEGE OF ENGINEERING

## Kurumbapalayam (Po), Coimbatore – 641 107

### AN AUTONOMOUS INSTITUTION

# Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai B.E COMPUTER SCIENCE AND TECHNOLOGY

### **19ME604- Data Analytics**

### **VI Semester**

## **Regulations 2019**

Puzzle 1: Sales Analysis Given a dataset containing sales data for different products, analyze the data to answer questions related to total revenue, best-selling products, average sales price, and monthly sales trends.

Puzzle 2: Customer Segmentation

Using a dataset with customer demographics and purchasing behavior, apply clustering techniques to segment customers into distinct groups based on their similarities.

Puzzle 3: Market Basket Analysis

Analyze transaction data to identify frequently co-occurring products and discover associations between items commonly purchased together.

Puzzle 4: Sentiment Analysis

Using customer reviews or feedback data, perform sentiment analysis to determine overall customer satisfaction and identify areas of improvement.

Puzzle 5: Fraud Detection

Given a dataset with financial transactions, build a model to detect fraudulent activities and classify transactions as fraudulent or legitimate.

Puzzle 6: Employee Attrition Prediction Analyze employee data to predict attrition and determine factors that contribute to employee turnover.

Puzzle 7: Website Traffic Analysis Analyze website traffic data to understand user behavior, identify popular pages, and determine the sources of traffic.

Puzzle 8: Time Series Forecasting Given a time series dataset, apply forecasting techniques to predict future values and identify trends and seasonal patterns.

Puzzle 9: Movie Recommendation System

Using a dataset with movie ratings, build a recommendation system to suggest movies to users based on their preferences.

Puzzle 10: Stock Market Prediction

Analyze historical stock market data to predict future stock prices and assess the performance of different prediction models.