Date: 02-09-2026

Expt. No. 2 Programs for I/O operations with Different Data Types

Spot Question:

An autonomous campus vehicle maintains a basic sensor record for each trip. The record contains the vehicle identification number, number of passengers, travelling speed, battery percentage, sensor status represented by a character code, and total distance travelled. Design a C program that accepts one complete sensor record and produces a formatted trip-status report. The program must use appropriate C data types for the different measurements and identifiers. The displayed report should preserve the required precision for numerical measurements and clearly represent the sensor status.

Expt. No. 3 Programs for Solving Expressions using Various Operators

Spot Question:

The CEG library wants to automate the calculation of a student's overdue fine. The system receives the number of overdue days, fine per day, number of previously overdue books, and a fixed administrative charge.

Develop a C program that calculates:

1. The basic overdue fine.
2. The additional charge based on previous overdue books.
3. The total amount payable.

Use appropriate arithmetic and assignment operators to construct the required expressions.