

Lab 10 (14/11/2025)

Spot Question: Device Configuration Manager

Create a program using:

- enum for device type → SENSOR, MOTOR, DISPLAY
- union storing sensor sensitivity, motor RPM, or display brightness
- bit-field struct storing power, error, and maintenance flags
- Pointer-based function to update and print configuration.

Sample Input:

Enter device type (0-SENSOR,1-MOTOR,2-DISPLAY): 0

Enter sensitivity: 0.85

Enter power status (1-On / 0-Off): 1

Enter error flag (0/1): 0

Enter maintenance flag (0/1): 1

Sample Output:

Device: SENSOR

Sensitivity: 0.85

Power: ON

Error: NO

Maintenance Required: YES

System Status: Operational with Maintenance Needed