

# Diagnostic tasks

## 1-configuration exercise:

- **DCM configuration:**
  1. DSL
    - In DcmDsl container:
      - ❖ DcmDslProtocolID equal DCM\_OBD\_ON\_CAN.
      - ❖ Set the protocol priority.
      - ❖ Reference the DcmDslProtocolSIDTable to service table.
    - 2. DSD
      - ❖ Create the service table.
      - ❖ Set the Session Reference.
      - ❖ Set the Security Lvl Reference.
- **DEM configuration:**
  - ❖ Create data element for voltage and temperature.
  - ❖ Create data element for temperature.
  - ❖ DIDs contain the two data elements.
  - ❖ Freeze frame class contain the DIDs.
  - ❖ Extended data class of Extended Data records.
  - ❖ Write the DTC value = 0X777919.
  - ❖ Add event and reference (DTC, extended data, freeze frame) to the event.
  - ❖ Set event name and ID.
  - ❖ Create a Debouncing algorithm In the DemEvent.
  - ❖ Set the Failed Threshold to 4.
  - ❖ FDC Inc Step Size.
  - ❖ FDC Dec Step Size.
  - ❖ Passed Threshold.
  - ❖ Jump Down, and its Value.
  - ❖ Jump Up, and its value.

## **2-DCM call sequence exercise:**

- I. Dcm\_TpRxIndication()
- II. ExtendedSession\_indication()
- III. ExtendedSession\_ModeEntry()
- IV. PduR\_DcmTransmit()
- V. Dcm\_TxConfirmation()