BayWa r.e.

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Science and innovation are excelling, but we need to take urgent action.

LET’S CONVERT POWER INTO EFFECT!

Here is your challenge.

Problem 1

Task:

- CSV file shows the performance of several subsystems of a solar park (15 minutes average values for one month, one subsystem per column).
- Which subsystems are potentially underperforming and should be inspected by a technician for further fault analysis?

Procedure:

- Load CSV & clean data. Handle missing values in a meaningful way, identify implausible values/outliers which might be related to sensoric faults and tag them.
- Identify subsystems that should potentially be checked by a technician. For this, an algorithm should be designed that can
  - identify anomalies in the present history and,
  - decide for future data on a shorter timeframe (e.g. last 6 hours of performance data at any time) whether a problem has occurred with a subsystem or not.

Hint: There might be groups of subsystems with similar behavior.

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