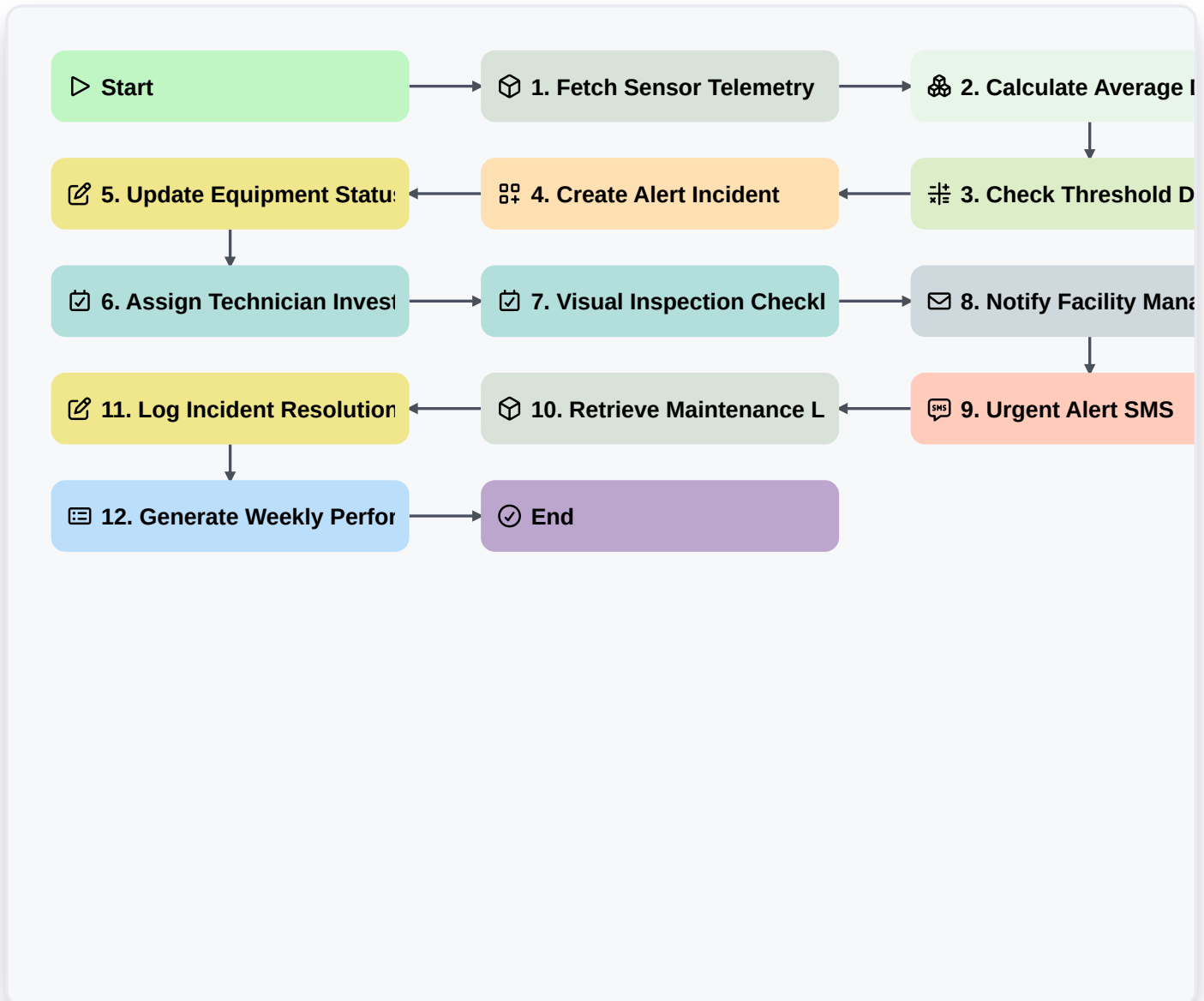


Building Automation System (BAS) Monitoring Process



▷ Start

Start of the Workflow/Process.

1. Fetch Sensor Telemetry

Retrieve latest temperature, humidity, and pressure readings from the BAS sensor data model.

2. Calculate Average Daily Temperature

Aggregate the retrieved sensor readings to find the mean temperature over the last 24 hours.

3. Check Threshold Deviation

Compare the average temperature against the predefined setpoint to calculate the degree of deviation.

4. Create Alert Incident

Create a new entry in the 'Incidents' data model when a deviation exceeds the allowed tolerance.

5. Update Equipment Status

Update the status of the specific HVAC unit in the 'Equipment' data model to 'Warning' or 'Critical'.



📌 6. Assign Technician Investigation

Create a task for the On-call Maintenance Engineer to inspect the hardware.

📌 7. Visual Inspection Checklist

A set of sub-tasks for the technician: check physical wiring, verify power supply, and inspect sensor calibration.

✉️ 8. Notify Facility Manager

Send an automated email to the Facility Manager summarizing the critical deviation and the created incident.

📱 9. Urgent Alert SMS

Send a high-priority SMS to the Lead Engineer for immediate-action-required-threshold-breach.

📦 10. Retrieve Maintenance Logs

Get the history of previous repairs for the affected equipment to identify recurring patterns.

✍️ 11. Log Incident Resolution

Update the 'Incident' entry with the technician's findings and resolution notes once the task is complete.

📄 12. Generate Weekly Performance Report

Create a summary report aggregating all incidents, deviations, and resolution times for the weekly management review.

🏁 End

End of the Workflow/Process.