Assumption:

1. I assume that all the wireless connections to the sensors will provide me some readings for each of the 3 sensors I.e. temperature, pressure and status. Right now, I am taking test data for the equipment and corresponding sensors to solve the problem.

Approach:

* The problem seems to form a star topology, since there is 1 HVAC system and various inter-connected equipment’s to it which in turn has 3 sensors. Thus, I am using an approach of graph theory where I have a HVAC graph with multiple equipment’s as my Vertex connected via airducts as edges. Each of this equipment will have an associated Id and Sensor object containing 3 sensors temperature, pressure and Operational status (Boolean true as ON and false as OFF).
* I will then iterate through the graph at each vertex which is the equipment in our case and return it whenever the status is true (ON) and temperature is greater than 100.