**Model-Based Reflex Agent for Temperature Control**

Here is the overview of the main event of this Python program simulates a model based reflex agent that controls heaters in multiple rooms based on a desired temperature.

* At first defines an agent that adjusts heaters based on room temperatures.
* Then stores the previous states of heaters (ON/OFF) for each room.
* Initializes the agent with a desired temperature and sets all heaters to OFF (False).
* Receives the current room temperature and stores it.
* Checks if the heater needs to be turned ON/OFF based on the sensed temperature.
* Updates the heater's state and returns an appropriate action message.
* Stores room names as keys and their current temperatures as values.
* Creates an agent instance with the given **desired temperature** and room data.
* Iterates through each room, **senses** its temperature, and **controls** the heater accordingly.
* Displays whether the heater is **turned ON, OFF, or remains unchanged**.
* Prints the updated heater states for all rooms.

Our model based reflex agent is ready now we can execute our program that’s it.