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**Section : 3A**

**Subject : Artificial Intelligence**

**Documentation of Task 1**

**“Model-Based Reflex Agent”**

**Class: Simple\_reflex\_agents**

This class represents a simple reflex agent that controls a heater based on temperature.

**Methods:**

1. **\_\_init\_\_(self, temp)**
   * Initializes the agent with a desired temperature.
   * **Parameters:**
     + temp (int): The target temperature for the heater.
2. **percieve(self)**
   * Takes user input for the current temperature.
   * **Returns:**
     + int: The entered temperature value.
3. **act(self, temp)**
   * Decides whether to turn the heater ON or OFF based on the current temperature.
   * **Parameters:**
     + temp (int): The current temperature.
   * **Prints:**
     + Heater ON if temp < desired\_temp.
     + Heater OFF if temp > desired\_temp.

**Usage:**

1. The user inputs the desired temperature when initializing the agent.
2. The agent perceives the current temperature via user input.
3. The agent makes a decision and prints the appropriate action.
4. The agent also evaluates predefined room temperatures and applies the same logic.



