# Jupyter Notebook: task3.ipynb

## Markdown Cell

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## Markdown Cell

## Roll no : 040  
## AI LAB 3B

## Code Cell

class ModelBasedReflexAgent:  
 def \_\_init\_\_(self, target\_temp):  
 self.target\_temp = target\_temp  
 self.previous\_action = None  
  
 def act(self, current\_temp):  
 if current\_temp < self.target\_temp and self.previous\_action != "ON":  
 self.previous\_action = "ON"  
 return "Turn heater ON"  
 elif current\_temp >= self.target\_temp and self.previous\_action != "OFF":  
 self.previous\_action = "OFF"  
 return "Turn heater OFF"  
 else:  
 return f"Heater already {'ON' if self.previous\_action == 'ON' else 'OFF'}"  
  
  
agent = ModelBasedReflexAgent(target\_temp=23)  
print(agent.act(20))   
print(agent.act(23))   
print(agent.act(23))

## Code Cell