

Homework 7 Z5

No outline required

#1 A portable electric heater system should turn on heat ($B0=1$) when the actual temperature ($A7-A4$) is less than the desired temperature ($A3-A0$). To let users see that the heater is on, the system should blink $B1$ on for 300 ms and off for 300 ms. Capture the system using multiple tasks and a shared variable.

#2 A store entry system has a person sensor connected to $A0$. When a person is detected, the system generates a tone by setting $B0$ to 1 for 1000 ms. To indicate that the system is on, the system always blinks an LED by setting $B1$ to 0 for 500 ms and to 1 for 500 ms, repeatedly.