

SF4H1 Pseudocode

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Algorithm 1 SF4H1

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1: procedure TEMPERATURE SENSOR WITH THERMOSTAT CONTROL
2:   Define necessary variables and port numbers
3:   Set screen contrast
4:   Set cursor to first line
5:   Print first line
6:   Set cursor to second line
7:   Print second line
8:   Delay 2500 ms
9:   Clear screen
10:  Set cursor to first line
11:  Print first line
12:  Set cursor to second line
13:  Print second line
14:  Delay 2500 ms
15:  Begin loop
16:  if Button has been pressed AND Not the same as previous button state AND More
    than 100 ms has passed then
17:    Switch units
18:    Print units
19:  if In Celsius mode AND More than 5000 ms have passed then
20:    Print Celsius
21:    Restart timer
22:  else if In Fahrenheit mode AND More than 5000 ms have passed then
23:    Print Fahrenheit
24:    Restart timer
25:  Print thermostat temperature on second line
26:  if Thermostat temperature is greater than threshold temperature then
27:    Buzz one tone for 500 ms
28:    Buzz other tone for 500 ms
29:    Restart timer
```
