```
main() {
      while (locked) {
            input = poll_keypad();
            if (input == unlock_code) {
                  locked = false;
            }
      }
      display_window_mode();
      window_size = 3;
      if (poll_keypad() == 'A') {
            window_size = poll_keypad();
      }
      display_window_size();
      temp_arr[window_size] = \{0, \ldots, 0\};
      i = 0
      while (true) {
            if (i == window_size) i = 0;
            temp = poll_sensor();
            temp_arr[i] = temp;
            if (temp_arr[window_size - 1] != 0) {
                  avg_temp = sum(temp_arr) / window_size
                  display_avg_temp();
            }
            if (poll_keypad() == 'A') {
                  display_window_mode();
                  window_size = poll_keypad();
                  display_window_size();
                  temp_arr[window_size] = \{0, ..., 0\};
            } else if (poll_keypad() == 'B') {
                  display_pattern_mode();
                  pattern = poll_keypad();
                  set_pattern(pattern);
            display_pattern_name();
            i++;
      }
}
```