

## project-template\main.c

```
1  #include "pico/stdlib.h"
2  #include "hardware/adc.h"
3  #include <stdio.h>
4  #include <string.h>
5
6  #define LED_PIN 15
7  #define BUFFER_SIZE 64
8
9  int main() {
10     stdio_init_all(); //initialize USB serial
11
12     gpio_init(LED_PIN);
13     gpio_set_dir(LED_PIN, GPIO_OUT);
14
15     adc_init();
16     adc_gpio_init(26);
17     adc_select_input(0);
18
19     char incoming[BUFFER_SIZE];
20     int index = 0;
21     uint16_t last_adc = 0;
22
23     while (true) {
24         uint16_t raw = adc_read();
25         if (raw != last_adc) {
26             last_adc = raw;
27             printf("%u\n", raw); // C# reads this
28         }
29
30         while (true) {
31             int c = getchar_timeout_us(0); // non-blocking
32             if (c == PICO_ERROR_TIMEOUT) break;
33
34             if (c == '\n' || c == '\r') {
35                 incoming[index] = 0; // null-terminate
36                 if (strcmp(incoming, "LedOn") == 0) {
37                     gpio_put(LED_PIN, 1);
38                     printf("LED is ON\n");
39                 } else if (strcmp(incoming, "LedOff") == 0) {
40                     gpio_put(LED_PIN, 0);
41                     printf("LED is OFF\n");
42                 }
43                 index = 0; // reset buffer
44             } else {
45                 if (index < BUFFER_SIZE - 1) incoming[index++] = (char)c;
46             }
47         }
48         sleep_ms(2000);
49     }
50 }
51
```