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|  | CSLR61 : EMBEDDED SYSTEMS  **LAB-1** | | | | | |  |
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1. Blink LEDs in alternate order – 1 and 3 together and 2 and 4 together.

*/\* 106119100 Rajneesh Pandey \*/*

#include "mbed.h"

DigitalOut led1(LED1);

DigitalOut led2(LED2);

DigitalOut led3(LED3);

DigitalOut led4(LED4);

int main(){

    while (1){

        led1 = !led1;

        printf("Blink! LED1 is now %d\n", led1.read());

        led3 = !led3;

        printf("Blink! LED3 is now %d\n", led3.read());

        wait\_ms(1000);

        led2 = !led2;

        printf("Blink! LED2 is now %d\n", led2.read());

        led4 = !led4;

        printf("Blink! LED4 is now %d\n", led4.read());

    }

}

**Graphical user interface

Description automatically generated**

1. Blink LEDs – count from 1 to 15; if the board is counting odd value, wait for 1 sec, else wait for 2 sec.
2. */\* 106119100 Rajneesh Pandey\*/*
3. #include "mbed.h"
4. BusOut myleds(LED1, LED2, LED3, LED4);
5. int main(){
6. while (1){
7. for (int i = 1; i < 16; i++){
8. myleds = i;
9. printf("%d ", i);
10. if (i & 1){
11. printf("odd count\n");
12. wait(1);
13. }
14. else{
15. printf("even count\n");
16. wait(2);
17. }
18. }
19. }
20. }

Graphical user interface, text

Description automatically generated

1. Blink LEDs – for all composite number below 15.
2. */\* 106119100 Rajneesh Pandey \*/*
3. #include "mbed.h"
4. BusOut myleds(LED1, LED2, LED3, LED4);
5. bool isComposite(int n)
6. {
7. if (n == 1)
8. return true;
9. for (int i = 2; i < n; i++)
10. {
11. if (n % i == 0)
12. return true;
13. }
14. return false;
15. }
16. int main()
17. {
18. while (1)
19. {
20. for (int i = 1; i < 16; i++)
21. {
22. if (isComposite(i))
23. {
24. myleds = i;
25. printf("%d is Composite Number\n", i);
26. wait(1);
27. }
28. }
29. }
30. }

Graphical user interface, text, application

Description automatically generated

1. Blink LEDs – to count even numbers
2. #include "mbed.h"
3. BusOut leds(LED1, LED2, LED3, LED4);
4. int main(){
5. while (1){
6. for(int i = 0; i < 16; i++){
7. if(i%2==0){
8. leds = i;
9. printf("count %d\n", leds.read());
10. wait(2);
11. }
12. }
13. }
14. }

Graphical user interface, text

Description automatically generated