Sri Lanka Institute of Information Technology

Lab Submission
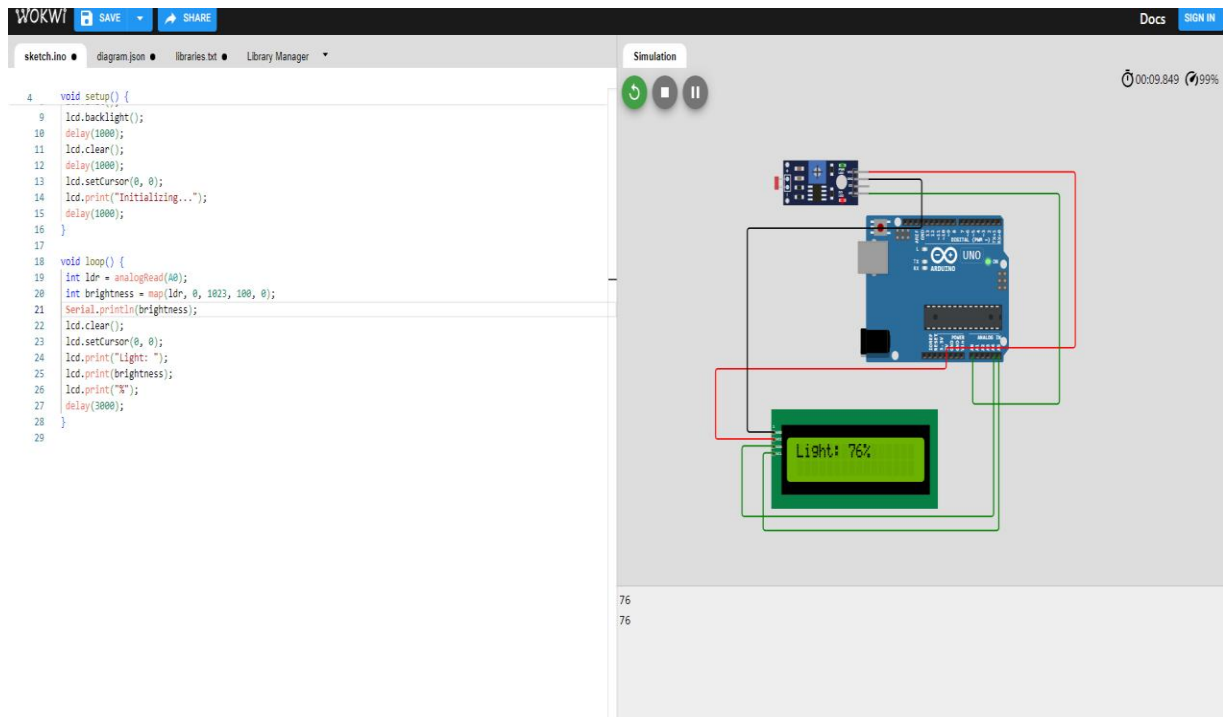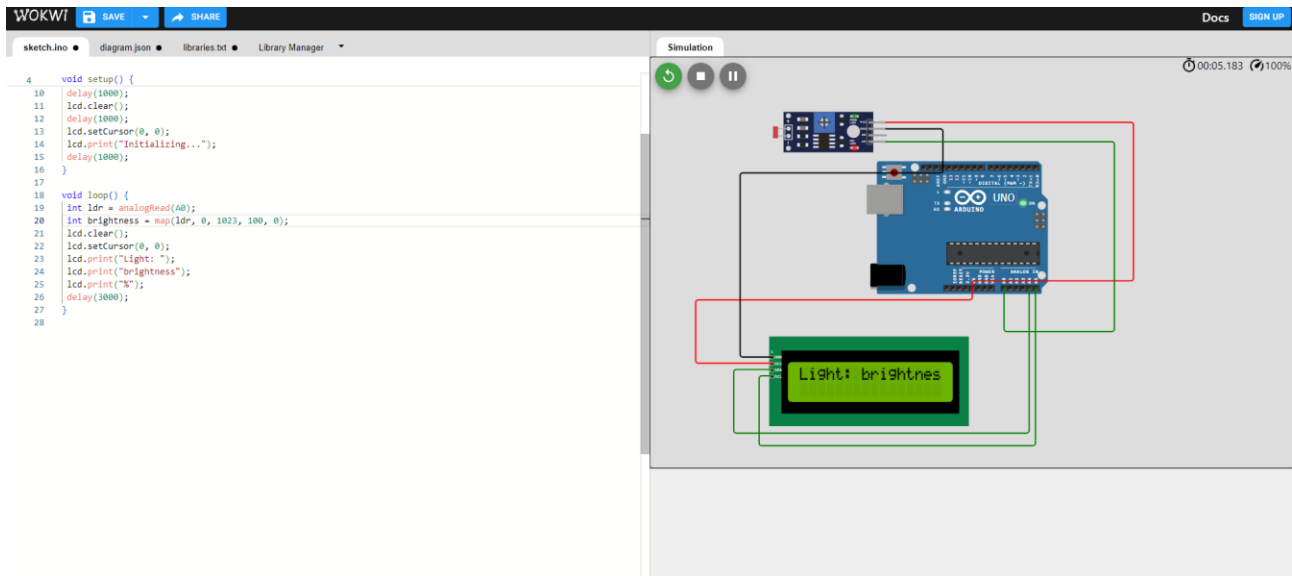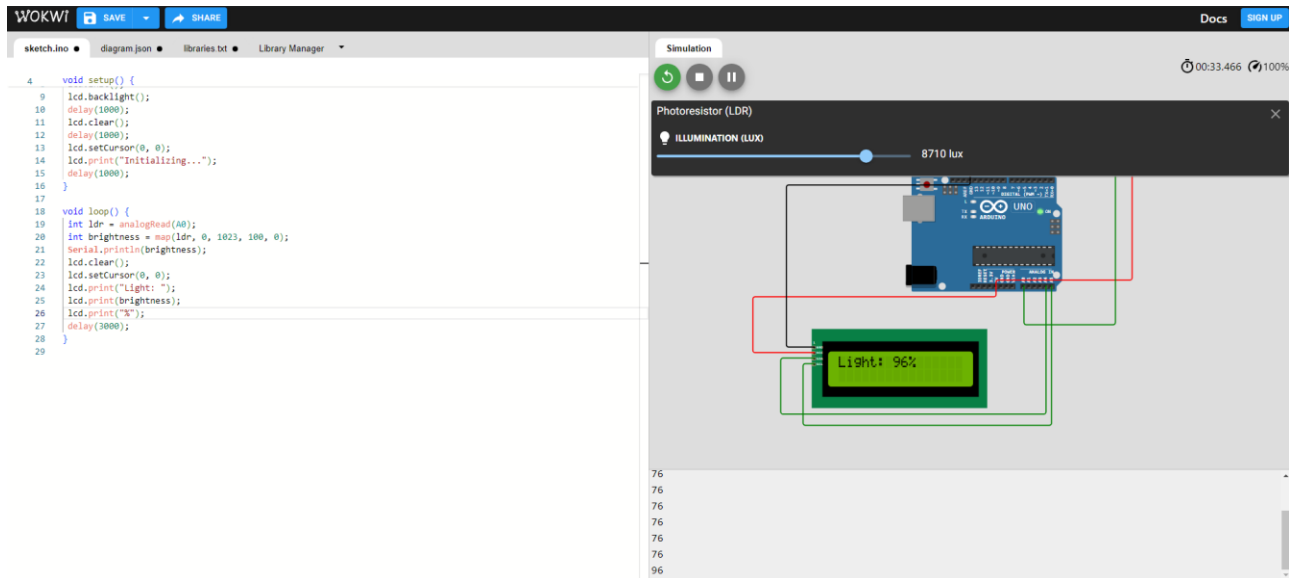# <Worksheet No.8>

<IT24102555>

<Weerathunga B.A>

Fundamentals of Computing | IT1140

B.Sc. (Hons) in Information Technology
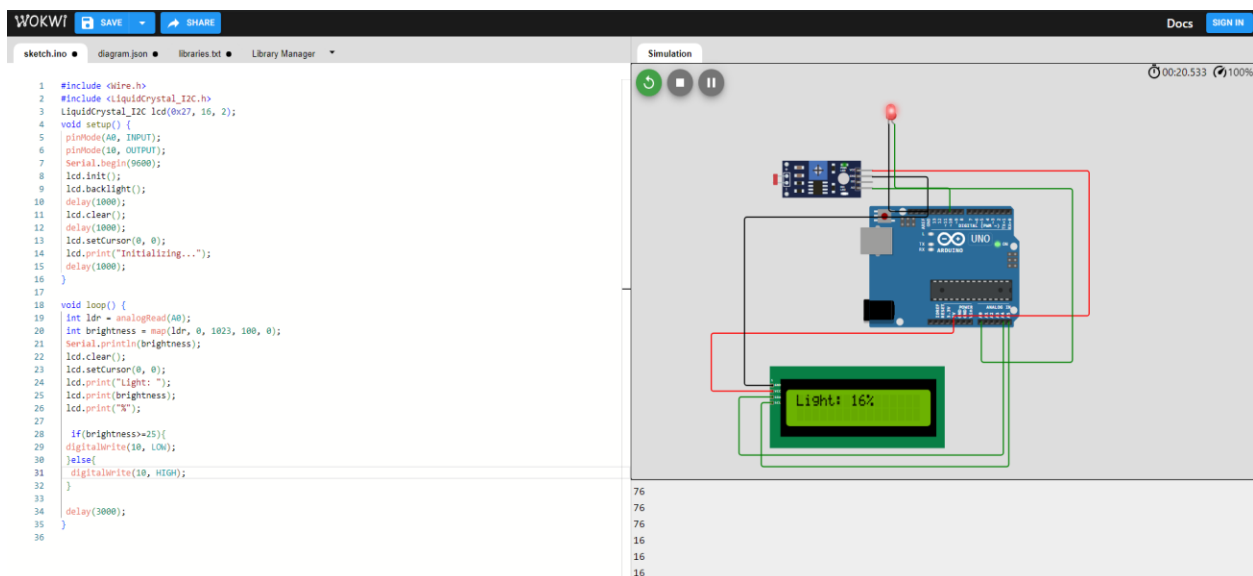
Activity 1


```
4    void setup() {
10   delay(1000);
11   lcd.clear();
12   delay(1000);
13   lcd.setCursor(0, 0);
14   lcd.print("Initializing...");
15   delay(1000);
16   }
17
18   void loop() {
19   int ldr = analogRead(A0);
20   int brightness = map(ldr, 0, 1023, 100, 0);
21   lcd.clear();
22   lcd.setCursor(0, 0);
23   lcd.print("Light: ");
24   lcd.print("brightness");
25   lcd.print("%");
26   delay(3000);
27   }
28
```



```
4    void setup() {
9    lcd.backlight();
10   delay(1000);
11   lcd.clear();
12   delay(1000);
13   lcd.setCursor(0, 0);
14   lcd.print("Initializing...");
15   delay(1000);
16   }
17
18   void loop() {
19   int ldr = analogRead(A0);
20   int brightness = map(ldr, 0, 1023, 100, 0);
21   Serial.println(brightness);
22   lcd.clear();
23   lcd.setCursor(0, 0);
24   lcd.print("Light: ");
25   lcd.print(brightness);
26   lcd.print("%");
27   delay(3000);
28   }
29
```

d) 3. lcd.clear() is used to reset the LCD Screen.

f) When simulating the circuit, the brightness percentage display on the LCD changes in response to the light intensity measured by the LDR.As the light level decreases, the LDR outputs a higher analog value, which is mapped to a higher percentage on the LCD.
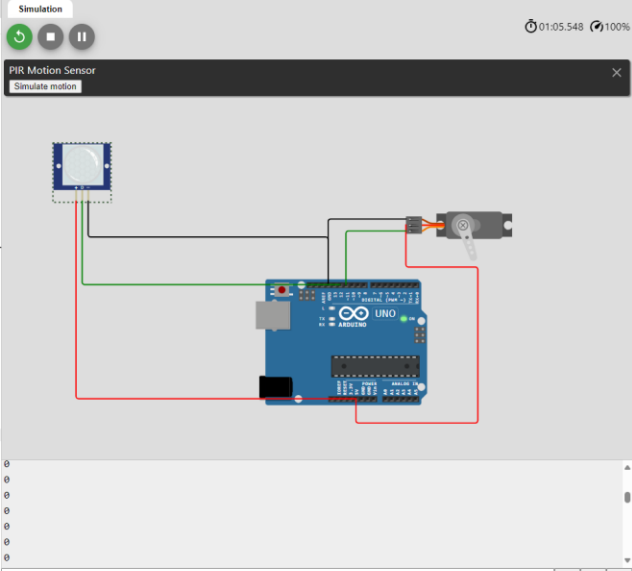
Activity 2