



Microprocessor and Microcontroller Based Design
LAB REPORT # 6

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CE-40

SYNDICATE - B

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DEPARTMENT OF COMPUTER AND SOFTWARE ENGINEERING

TASK :

CODE:

LabQ1

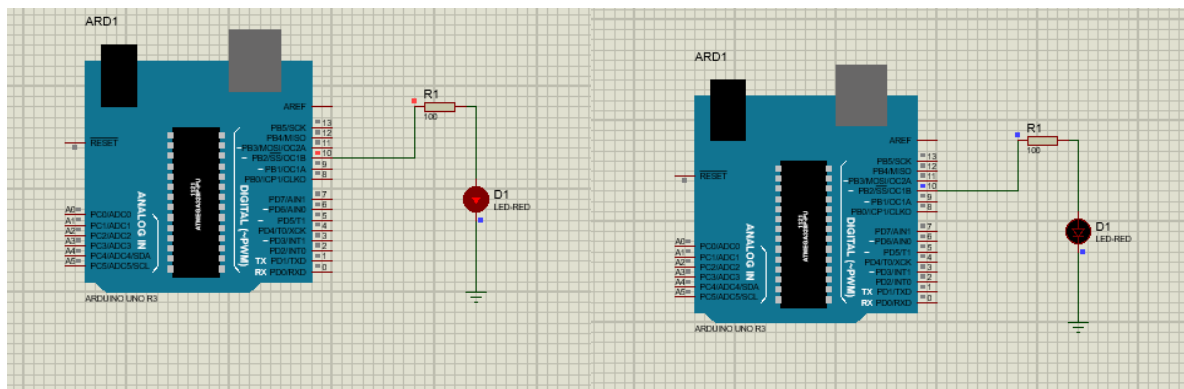
```
#include<Keypad.h>
#include<LiquidCrystal.h>
const int rs = 13, en = 12, d4 = 11, d5 = 10, d6 = 1, d7 = 0;
LiquidCrystal lcd(rs,en,d4,d5,d6,d7);
const byte ROWS = 4;
const byte COLS = 4;
char keys[ROWS][COLS] = {{ '7', '8', '9', '/' }, { '4', '5', '6', '*' }, { '1', '2', '3', '-' }, { 'c', '0', '=', '+' }};

byte rowPins[ROWS] = {2,3,4,5};
byte colPins[COLS] = {6,7,8,9};
int i = 0 , k = 0, c = 0, r = 2;
double d = 0, result = 0;
char arr[10];
char prevk = 0;

Keypad keypad = Keypad( makeKeymap(keys), rowPins, colPins, ROWS, COLS);

void setup() {
  lcd.begin(16,2);
  lcd.setCursor(c,0);
  lcd.print("Hello Welcome to");
  lcd.display();
  lcd.setCursor(c,1);
  lcd.print("Wajih & Ars Calc");
  delay(1000);
  lcd.display();
  for(k=0;k<16;k++){
    lcd.setCursor(k,1);
    lcd.print(" ");
  }
```

OUTPUT:



We when play the code the light brightens up to max and then gradually go back to dimmest.

The delay is there to properly look into the dimming process.

LED dimming was not caught in print screen or through snipping tool hence not there, but can be seen through video.

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