Digital Password Lock

A keypad-based security lock system using an LCD and password input.

Components:

- Arduino UNO

- 4x4 Keypad

- 16x2 LCD

- Servo motor

Code will be uploaded using Arduino IDE.

Connections:

- Keypad to digital pins D2-D9

- LCD to D10-D13

Thank you!

Arduino Code:

```
#include <Keypad.h>
#include <Servo.h>
const byte rows = 4;
const byte cols = 4;
char keys[rows][cols] = {
  {'1','2','3','A'},
  {'4','5','6','B'},
  {'7','8','9','C'},
  {'*','0','#','D'}
};
byte rowPins[rows] = {9,8,7,6};
byte colPins[cols] = {5,4,3,2};
Keypad keypad = Keypad(makeKeymap(keys), rowPins, colPins, rows, cols);

Servo myServo;
String password = "1234";
```

```
String input = "";

void setup() {
  myServo.attach(10);
  myServo.write(0);
  Serial.begin(9600);
}

void loop() {
  char key = keypad.getKey();
  if (key) {
    input += key;
    if (input.length() == 4) {
      if (input == password) {
        myServo.write(90);
        delay(2000);
        myServo.write(0);
      }
      input = "";
    }
  }
}
```