ASSIGNMENT -1

1.connect two led s to any digital pin in the Arduino with switch the 1st led should glow for shorter time and 2nd led should glow after 3 sec?

PROGRAM:-

const int switchPin = 2;

const int led1Pin = 9;

const int led2Pin = 10;

unsigned long pressStartTime = 0;

bool switchPressed = false;

bool led1State = false;

bool led2State = false;

void setup() {

pinMode(switchPin, INPUT\_PULLUP);

pinMode(led1Pin, OUTPUT);

pinMode(led2Pin, OUTPUT);

}

void loop() {

int switchState = digitalRead(switchPin);

if (switchState == LOW) {

if (!switchPressed) {

pressStartTime = millis();

switchPressed = true;

}

} else {

if (switchPressed) {

unsigned long pressDuration = millis() - pressStartTime;

switchPressed = false;

if (pressDuration >= 1000 && pressDuration < 3000) {

led1State = true;

led2State = false;

} else if (pressDuration >= 3000) {

led1State = false;

led2State = true;

} else {

led1State = false;

led2State = false;

}

digitalWrite(led1Pin, led1State ? HIGH : LOW);

digitalWrite(led2Pin, led2State ? HIGH : LOW);

}

}

}

