

Build a circuit that contains two push buttons, an LED, and any other basic components you think you need.

The LED should only light when both push buttons are pressed. Only use your Arduino for power and ground.

```
#include <Servo.h>
```

```
int sensorValue; //value of potentiometer, 0 - 1023
```

```
int analogInPin = A0; //Arduino pin connected to potentiometer
```

```
int analogOutPin = 6; //Arduino pin connected to LED
```

```
Servo myLED; //LED controlled by servo library
```

```
void setup(){  
}
```

```
void loop(){  
  
sensorValue = analogRead(analogInPin);  
  
sensorValue = map(sensorValue, 0, 1023, 0, 255); //analogRead ranges from 0 to 1023; analogWrite  
ranges from 0 to 255; this maps the sensorValue to the lower output range  
  
analogWrite(analogOutPin,sensorValue);  
}
```

