

SERIELL PORT

```
int ledPin = 3;
int buttonPin = 2;
int potPin = A0;

void setup() {
  // setup pin modes
  pinMode(ledPin, OUTPUT);
  pinMode(buttonPin, INPUT_PULLUP);
  pinMode(potPin, INPUT);

  // initialise serial port with baud rate of 9600
  Serial.begin(9600);
}

void loop() {
  // read the state of buttonPin and store it as buttonState (0 or 1)
  int buttonState = digitalRead(buttonPin);

  // read the value of the pot, divide it by 4, and store it as potValue
  int potValue = analogRead(potPin);
  int filteredPotValue = potValue / 4;

  // turn led on with the value of potValue
```

Programming

```
analogWrite(ledPin,filteredPotValue);
```

```
// print the value of the button
```

```
Serial.print("Button: ");
```

```
Serial.print(buttonState);
```

```
Serial.print(" ");
```

```
// print the value of the pot
```

```
Serial.print("Pot: ");
```

```
Serial.print(potValue);
```

```
Serial.print(" ");
```

```
// print the value of the pot / 4 with a line return at the end
```

```
Serial.print("Pot/4: ");
```

```
Serial.println(filteredPotValue);
```

```
}
```