

Exercise 7_Reading an ASCII-encoded string

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Code to control the RGB ratio, when three integers are put into the serial monitor divided by commas:

e.g. 200,140,50

```
int redpin = 2; // select the pin for the red LED
int greenpin = 3; // select the pin for the green LED
int bluepin = 4; // select the pin for the blue LED
int red;
int green;
int blue;

void setup() {
  pinMode(redpin, OUTPUT); //Set pins as output
  pinMode(greenpin, OUTPUT);
  pinMode(bluepin, OUTPUT);
  Serial.begin(9600);
}

void loop() {
  if (Serial.available() > 0){ // send data only when you receive data
    red = Serial.parseInt();
    green = Serial.parseInt();
    blue = Serial.parseInt();
    Serial.parseInt(); //To compromise for an extra null
  }

  analogWrite(redpin, red); //Send data to pins
  analogWrite(greenpin, green);
  analogWrite(bluepin, blue);
}
```

Questions

- 7a: What is a RGB value? Why does it use the interval 0-255?

An RGB value is the ratio between the three parameters RED, GREEN and BLUE. The interval 0-255 is used because the values are stored using 8 bits or 1 byte

- 7b: What does the function Serial.parseInt() do?

The function reads an integer from the serial monitor until it meets a non-digit.