

$$V_{out} = Vin \cdot \frac{R2}{R1 + R2}$$

$$Vin = Tx_{orduino} = 5v \quad R1 = 4.7 k\Omega$$

$$V_{out} = Rx_{HC06} \quad R2 = 10 k\Omega$$

$$Rx_{HC06} = 5v \cdot \left(\frac{10k\Omega}{4.7k\Omega + 10k\Omega}\right) = 3.4v$$