

Week 4 Quiz

1. What is the name of the Python package used to control the Raspberry Pi camera module?

- a. rpicamera
- b. picamera
- c. picam
- d. camera

2. What function in the camera library is used to take a picture?

- a. snap()
- b. photo()
- c. picture()
- d. capture()

3. What is a "duty cycle"?

- a. The period of a square wave
- b. The fraction of time a square wave is high
- c. The frequency of a square wave
- d. The duration of the high pulse of a square wave

4. Why is pulse width modulation useful?

- a. It is commonly used to transmit video data
- b. It is used to control the Raspberry Pi camera module
- c. It can be used to mimic an analog signal
- d. It can be used to read data from camera sensors

5. How many input wires does a servo have?

- a. 2
- b. 3
- c. 4
- d. 5

6. Why is it common to use an external power supply to drive a servo?

- a. AC power is needed to drive a servo
- b. A servo needs more current than a microcontroller can provide
- c. A servo needs more voltage than a microcontroller can provide
- d. A servo requires power in the form of a square wave

7. The CSI camera interface of the Raspberry Pi needs to be activated before using the camera module.

- True
- False

8. The speed of a servo motor is easily controlled.

- True
- False