Mission 6 Review Kahoot Questions

A servo has all the following except one. Which ONE is NOT part of a servo?	a. A CD motor and gearbox b. Speaker c. A controller circuit d. An internal feedback mechanism
Which statement about a “finite-state machine” is FALSE?	a. It is the status of a system with transitions. b. It means your program can only be in one state at a given time. c. “Finite” means an unlimited amount of possibilities. d. Usually “state” is based on variables in your code.
Which statement about “state” is FALSE?	a. A state is required for the code to run. b. A state is a phase of a program. c. Keeping track of states helps you manage your code. d. Each state might have its own set of conditions it is tracking.
Which statement about “transition” is FALSE?	a. A transition is moving between states. b. A transition moves the program from one state to another. c. A transition happens when a condition is met. d. A transition is optional in a finite-state machine.
Which peripheral can rotate continuously forward and backward?	a. Potentiometer b. 360 servo c. 180 servo d. Divider board
Which peripheral moves to a specified position and holds its place?	a. Potentiometer b. 360 servo c. 180 servo d. Divider board
Which of the statements about the 360 servo is FALSE?	a. It rotates faster with a higher cycle percentage. b. It has continuous rotation. c. It has no sense of position. d. It rotates forward and backward.
What signal is required to operate a servo?	a. Voltage b. Analog PWM c. True or False value d. Digital PWM
What code sets up the servo?	a. fan = exp.pwm_in(exp.PORT0, frequency=2) b. fan = exp.analog_out(exp.PORT0, frequency=PERIOD) c. fan = exp.digital_out(exp.PORT0, frequency=2) d. fan = exp.pwm_out(exp.PORT0, frequency=PERIOD)
Evaluate the expression: 12 // 10	a. 1.2 b. 1 c. 2 d. .83
Evaluate the expression: 7 // 4	a. 1.75 b. 1 c. 2 d. .75

Given this percentage of the cycle, which direction will a 360 servo rotate? 60%	a. Forward b. Stopped c. Backward d. Depends on the state
Given this percentage of the cycle, which direction will a 360 servo rotate? 20%	a. Forward b. Stopped c. Backward d. Depends on the state
Given this percentage of the cycle, which direction will a 360 servo rotate? 80%	a. Forward b. Stopped c. Backward d. Depends on the state

This code is an example of:
`while True:`
`  if state == "maintenance":`
`  if switch.value == POWER_ON:`
`  fan.duty_cycle = set_servo(FORWARD)`
`  state = 'active'`
`  elif state == "active":`
`  if switch.value == POWER_OFF:`
`  fan.duty_cycle = set_servo(STOP)`
`  state = 'maintenance'`
	a. A compound condition
	b. Setting up a peripheral
	c. Using REPL
	d. A finite-state machine