Homework 22.10.25

ວຽກບ້ານ

ອິງຕາມອຸປະກອນທີ່ list ໃຫ້ລຸ່ມນີ້ (40 items)

- 1. ໃຫ້ອະທິບາຍອຸປະກອນແຕ່ລະອັນແມ່ນຫຍັງ?
- 2. ການໃຊ້ງານຂອງອຸປະກອນແຕ່ລະອັນເຮັດວຽກແນວໃດ?
- 3. ໃນຫົວຂໍ້ອຸປະກອນຈະຕ້ອງປະກອບມີ:
 - ຊື່ອຸປະກອນ
 - ຮູບພາບອຸປະກອນຕົວຈິງ
 - ຮູບອຸປະກອນແບບ Schematic Diagram ຫລື PINOUT Guide ພ້ອມອະທິບາຍແຕ່ລະພາກສ່ວນ
 - etc..
- 4. ໃຫ້ຫົວຂໍ້ຕົວຢ່າງການນໍາໃຊ້ອຸປະກອນນັ້ນ

Arduino Starter Kit Numbered Checklist

† Core Boards & Interfaces

- 1. Arduino Uno board
- 2. Breadboards
- 3. USB cable

Wiring & Connectors

- 4.

 Jumper wires (male-to-male)
- 5. Umper wires (male-to-female)
- 6. Jumper wires (female-to-female)
- 7. 9V Battery Connector

Basic Components

- 8. LEDs (Red: 5, Yellow: 5, Blue: 5, RGB: 1)
- 9. RGB module
- 10. Resistors (220Ω, 1kΩ, 10kΩ)
- 11. Push Buttons (x4 with Lids)
- 12. \square Potentiometer (5k Ω)
- 13. Active Buzzer
- 14. Passive Buzzer

Displays & Output

- 15. 16x2 LCD display
- 16. I2C Serial Adapter board module
- 17. 7-segment display (Common Cathode +)
- 18. 4-Digit 7-Segment Display
- 19. 8x8 Dot Matrix display

🙎 Sensors & Input Modules

- 20. Temperature and humidity sensor (DHT11)
- 21. LM35 Temperature Sensor
- 22. Tilt sensor (x2)
- 23. Photoresistor (LDRs x3)
- 24. PIR sensor
- 25. Ultrasonic module
- 26. Sound sensor
- 27. Water sensor
- 28. Flame sensor
- 29. RFID module
- 30. RFID tag
- 31. Infrared receiver

33. Joystick module 34. 4x4 Matrix Keyboard Module 35. Relay module Motors & Drivers 36. Servo motor 37. Stepper motor 38. Stepper motor driver board ICs & Modules 39. Real-time Clock Module DS1302 40. 74HC595 Chip

Remote & Control

32. Infrared remote control

