BLUE PRINT _ ICT LEVEL 8 ICT-CP

1. Explain the use of the Arduino Uno and Nano microcontrollers
2. Explain the use of the setup() and loop() functions.
3. Know the function of the digitalWrite(), digitalRead(), delay(), and pinMode() code lines.
4. Mention the electronic components commonly used with Arduino, along with their functions.
5. Explain the use of symbols in the Arduino program code (sketch).
6. Explain the use of if statements in Arduino program code.
7. Explain how to use potentiometer components.
8. Explain how to use the push button component.
9. Explain the difference between HIGH and LOW commands.
10. Mention the possible mistakes that can be made if an LED in the Arduino circuit does not turn on.
11. Recognize the function of sensors from images
12. Recognize the names of electronic components supporting Arduino
13. Understand the pin configuration of electronic components that will be connected to Arduino
14. Distinguish between the largest and smallest resistor values
15. By looking at the hardware circuit and coding, you can predict the results of the simulation if it is run
16. Determine the cursor position for a character that appears on the 16x2 LCD
17. Understand the meaning of Arduino coding.
18. Know how to turn on the RGB LED so that it can light up in a certain color (red/green/blue).
19. Mention the differences between Tinkercad's Circuit and Wokwi
20. Explain the use of the void loop() and void setup() functions
21. Know what characters or codes need to be added so that the Arduino code does not have errors.
22. Understanding how to use the LDR sensor based on specific needs.
23. Knowing when to use Digital output and Analog output on the LDR sensor module.