Conclusion

- In this utility, you can use Serial.begin() to initiate serial communication, use Serial.print( ) or Serial.println() to display data in monitor control, and use Serial.available() to control . if available. It is a type of material. It can also read input data from the serial port using t he Serial.read() function and transfer the data to the serial port using the Serial.write() fun ction.
- These tests demonstrate the versatility of Arduino in terms of programming automation a nd data analysis through communication links. By integrating sensors and LEDs, they det ect realworld events such as adjusting LED brightness, monitoring room temperature, and responding to the environment with color cues. This demonstrates the effectiveness of Ar duino in creating solutions for a variety of tasks and encourages further exploration of its capabilities.
- This experiment demonstrates the use of serial communication in Arduino programming t o display sensor data on the monitor and control the LED based on that data.
- In the first experiment, a potentiometer is used to adjust the brightness of the LED and di splay the corresponding voltage on the meter.
- The second test uses a thermometer to read the current temperature of the room and place s it on the thermometer.
- The third test uses a temperature sensor to turn on an RGB LED of a specific color based on the temperature sensor. These tests demonstrate the potential of Arduino programming in automation and data monitoring.