1. In this project, we will control the brightness of an LED using an ATTiny85 microcontroller and a potentiometer. The potentiometer will act as an analog input device, allowing the user to adjust the voltage that is read by the ATTiny85. Based on this input, the microcontroller will adjust the PWM (Pulse Width Modulation) signal sent to the LED, controlling its brightness.

Circuit Setup:

1. ATTiny85 Connections:
    - VCC pin of the ATTiny85 is connected to the 5V rail on the breadboard.
    - GND pin of the ATTiny85 is connected to the GND rail on the breadboard.
2. LED Connections:
    - The Anode (long leg) of the LED is connected to Pin 0 (PB0) of the ATTiny85 through a 220Ω resistor to limit the current.
    - The Cathode (short leg) of the LED is connected to the GND rail.
3. Potentiometer Connections:
    - One end of the potentiometer is connected to 5V.

- The other end of the potentiometer is connected to GND.
- The wiper (middle pin) of the potentiometer is connected to Pin 2 (PB3) on the ATTiny85 to read the analog input.

4. Programming the ATTiny85:
    - Use USBasp or Arduino as ISP to program the ATTiny85.
    - Connect the USBasp or Arduino as ISP to the MOSI, MISO, SCK, and RESET pins on the ATTiny85.
    - Ensure the ATTiny85 is properly powered (either through USBasp or external 5V/3.3V power supply).
5. Power Supply:
    - The ATTiny85 will be powered either through an external 5V supply or the programmer if it supports it.