

Instruction for LED Light Chaser

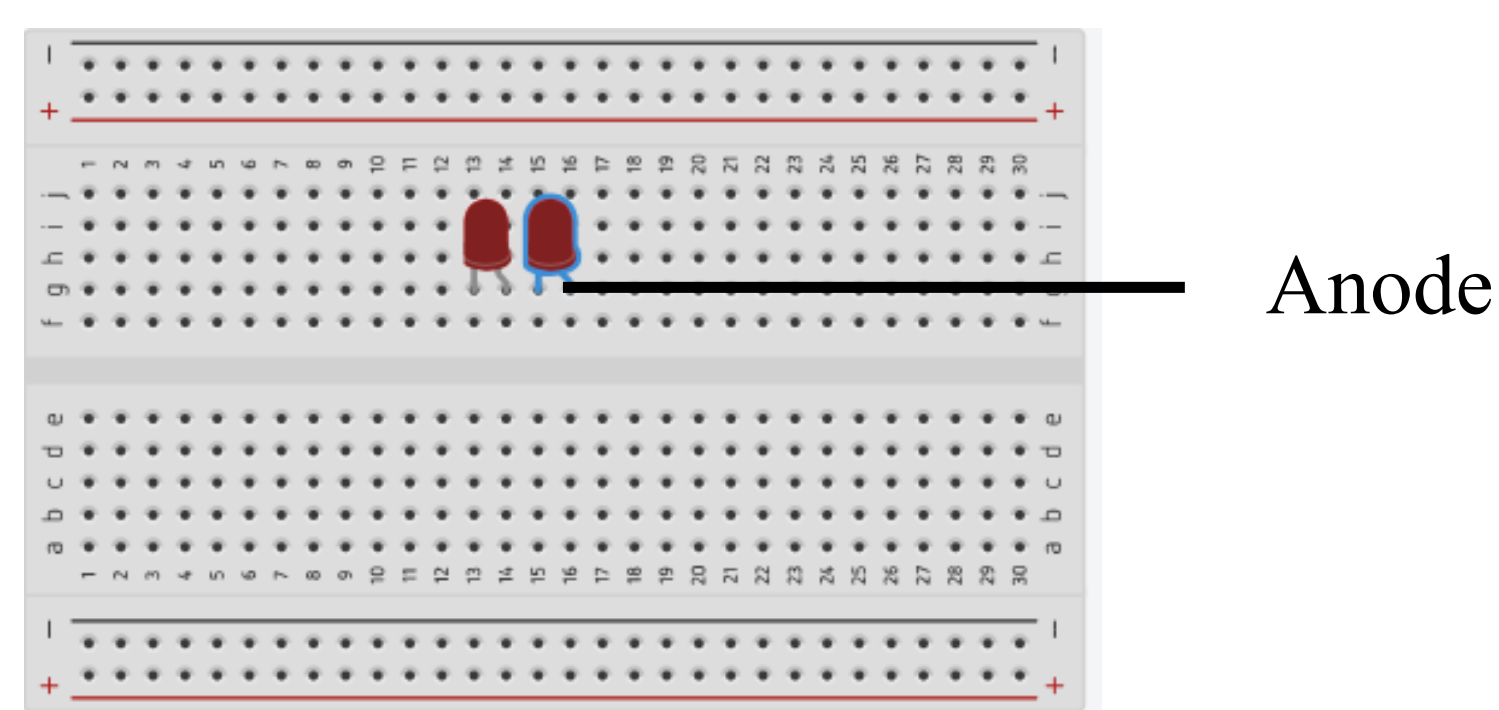
Materials Required:

- Arduino uno
- LED
- Resistor
- Jumper wires
- Breadboard

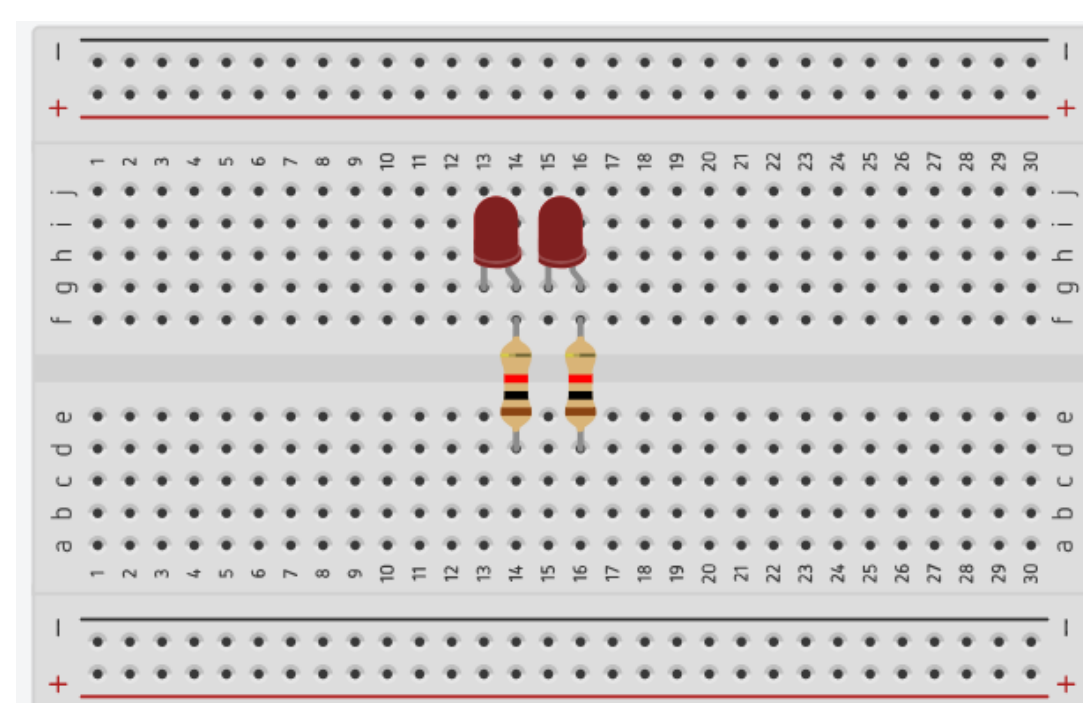
Steps:

Step ① Collect all components: Arduino Uno, breadboard, LEDs, resistors, jumper wires, and USB cable.

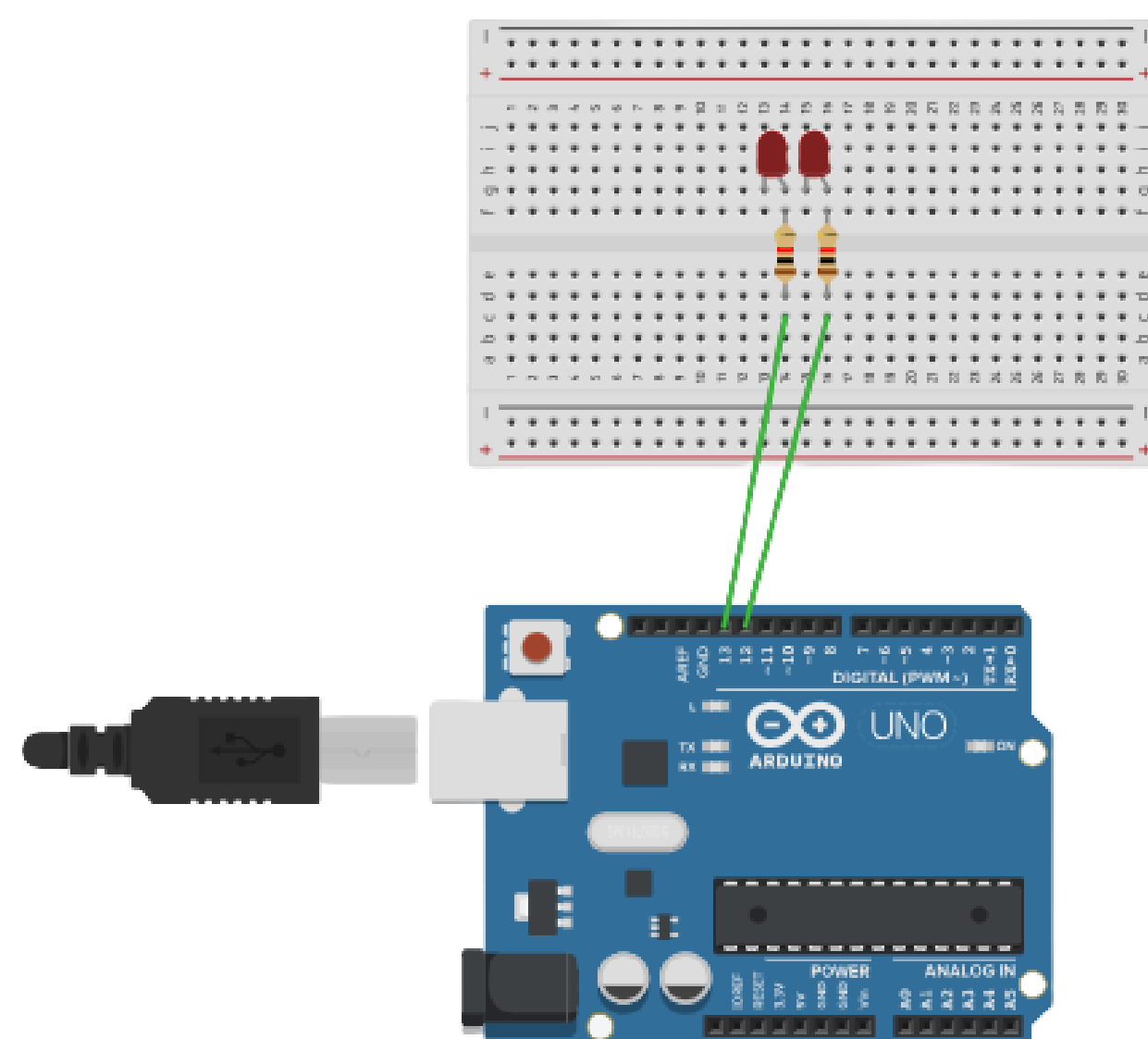
Step ② Insert LEDs in a straight line with all long legs facing the same direction.



Step ③ Attach one resistor to the long leg (anode) of each LED.

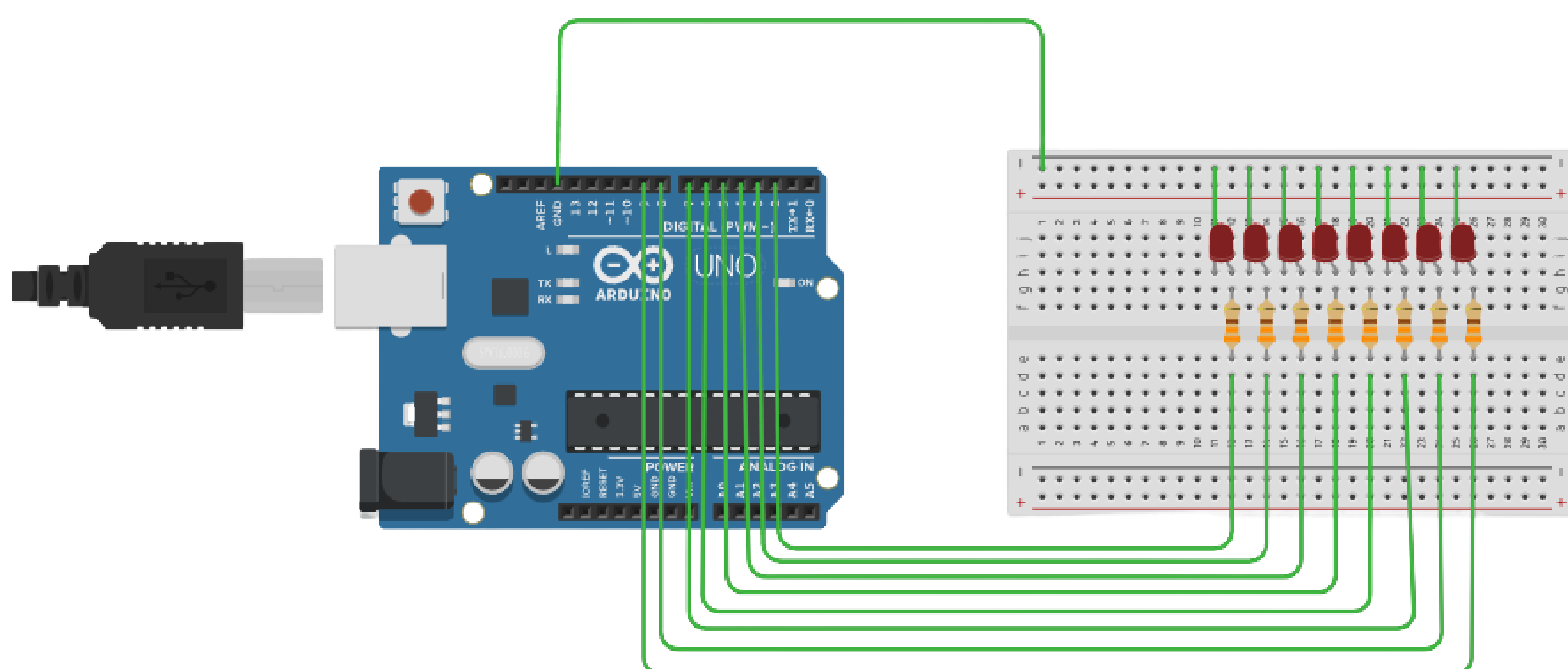


Step ④ Use jumper wires to connect each resistor to different Arduino digital pins.



Step ⑤ Connect all LED short legs to the breadboard ground rail and link it to Arduino GND.

Step ⑥ Connect the Arduino using a USB cable, upload the code, and observe the LED chaser effect.



Code

```
int ledPins[]={2,3,4,5,6,7,8,9};
int totalLEDs=8;

void setup()
{
  for (int i=0; i<totalLEDs; i++)
  {
    pinMode(ledPins[i], OUTPUT);
  }
}

void loop(){
  //Forward Direction
  for(int i=0; i<totalLEDs; i++)
  {
    digitalWrite(ledPins[i],HIGH);
    delay(100);
    digitalWrite(ledPins[i],LOW);
  }

  //Reverse direction
  for(int i=totalLEDs-1; i=0; i--)
  {
    digitalWrite(ledPins[i],HIGH);
    delay(100);
    digitalWrite(ledPins[i],LOW);
  }
}
```