Implementation of a Transistor Circuit

TEAMS OF 2: A transistor is a semiconductor device that can be used as an “electrical switch” or as an amplifier. We will learn more about how transistors work later in the class. Implement the following circuit on your Arduino:

Now, write a simple program to make the LED blink on and off.

To do this, make pin 4 go HIGH and LOW in an infinite loop, and you choose the duration of the blinks.

```cpp
void setup() {
  pinMode(4, OUTPUT);
}

void loop() {
  digitalWrite(4, HIGH);
  delay(1000);
  digitalWrite(4, LOW);
  delay(1000);
}
```

Question: What is happening when you change the values of the pause command??????

Answer: The transistor is SWITCHING the LED on and off.

We will use transistors to activate a relays for switching solenoid valves and our fishtank heater on and off. Now, let’s learn about how transistors work and more about semiconductors in general.