Diagram

Description automatically generated

1. I inserted my green ground wire and red power wire into the bread board to power it.
2. The H-bridge and the button were then set in place bridging the gap on the board with fair few pins apart from each other.
3. The button was then wired to the boards ground line and then pin 2 on the Arduino.
4. Pin 3 was connected to the first pin on the H bridge and Pin 4 was connected to the second pin on the H bridge
5. The Third pin on the H bridge was then grounded to the bread boards ground line and the ground for the motor was connected in line with that.
6. The next pin on the H bridge was then connected to the power line for the motor
7. Pin 5 on the Arduino was then connected to the second to last leg of the H bridge.
8. Finally, last leg was connected to the bread boards power line.
9. The code came predominantly from the power point slides. I have comments explaining it.

//Vince Comaroto Assignment 8

int enablePin=3;//Enable

int in1Pin = 4; //Pin 4

int in2Pin =5; //Pin 5

int switchPin=2 // the Buttons Pin

void setup()

{

pinMode(enablePin,OUTPUT);

pinMode(in1Pin,OUTPUT); //Pushing power to Pin 4

pinMode(in2Pin,OUTPUT); //Pushing power to Pin 5

pinMode(switchPin,INPUT\_PULLUP); // Activating the button

}

void loop()

{

boolean reverse = digitalRead(switchPin); //Variable read in from the button press

setMotor(reverse); //Passing button press to function

}

void setMotor(boolean reverse){ //Function to control motor functions

analogWrite(enablePin,255); //Controls fan power

digitalWrite(in1Pin,!reverse); //Set fan direction

digitalWrite(in2Pin,reverse); //Changes fan direction

}