

```

//establish red & green LEDs. Make sure the positive leg (long) of the LED is in the
//same numbered Arduino slot. If not move the wire, or change the numbers here.
int RED = 13;
int GREEN = 12;

// connect motor controller pins to Arduino digital pins.
int enA = 11;
int in1 = 10;
int in2 = 9;

void setup() {
  // put your setup code here, to run once:
  pinMode(RED, OUTPUT);
  pinMode(GREEN, OUTPUT);
  pinMode(enA, OUTPUT);
  pinMode(in1, OUTPUT);
  pinMode(in2, OUTPUT);

  delay(10000); //Gives 10 seconds after turning robot on before it does anything

  digitalWrite(RED, HIGH); //A quick red flash then a 1 second delay before he moves
  delay(3); //The flash is FAST so you have to watch for it or you
  digitalWrite(RED, LOW); //will miss it. When it flashes that's when I say
  delay(1000); //"Mr Robot, come here please..."

  //This section has the robot move forward slowly 2.5 seconds then abrupt stop
  //You may need to play with this depending on the size of your wheels and how far
  //you want your robot to move. I have the first second of travel broken into 4 phases
  //of 25/1000ths of a second each. Power starts at nearly full and then very quickly
  //drops down to a slow pace. I did this because if the batteries are low, you need
  //the fast 'kick start' to get him to overcome his stationary inertia.
  digitalWrite(in1, HIGH);
  digitalWrite(in2, LOW);
  analogWrite(enA, 200);
  delay(25);
  analogWrite(enA, 170);
  delay(25);
  analogWrite(enA, 130);
  delay(25);
  analogWrite(enA, 100);
  delay(25);
  analogWrite(enA, 70);
  delay(1800); //<--THIS is where you need to adjust if you want him to move
  //more or less than he does. Don't mess with the numbers above
  digitalWrite(in1, LOW); //turns the motor off
  digitalWrite(in2, LOW);

  delay(9000); //9 second delay while I say "Oh, he stopped in time! Can you hear me?"

  digitalWrite(GREEN, HIGH);
  delay(3000); //Yes response as GREEN LED turns on for 3 seconds
  digitalWrite(GREEN, LOW);

  delay(12000); //12 second delay for me to realize green means yes and then to ask if
  his other sensors are working

```

```

digitalWrite(GREEN, HIGH);
delay(2000); //Yes response as GREEN LED turns on for 2 seconds
digitalWrite(GREEN, LOW);

delay (10000); //10 second delay as I remind him of his mission, does he understand
his mission?

digitalWrite(GREEN, HIGH);
delay(2000); //Yes response as GREEN LED turns on for 2 seconds
digitalWrite(GREEN, LOW);

delay (6000); //6 second delay as I ask: Do you need any food or water for your trip?

digitalWrite(RED, HIGH);
delay(2000); //No response as RED LED turns on for a second
digitalWrite(RED, LOW);

delay (8000); //8 second delay as I say "We have a deal. Let's shake on it. Shake!"

//This is where the robot should twitch.

{
  for(int X=0; X<25; X++) //If you want him to twitch longer, change the 25 to a
  bigger number
  {
digitalWrite(in1, HIGH);
digitalWrite(in2, LOW);
analogWrite(enA, 80);
delay(100);
digitalWrite(in1, LOW);
digitalWrite(in2, HIGH);
analogWrite(enA, 80);
delay(100);
}
}
digitalWrite(in1, LOW); //turns the motor off
digitalWrite(in2, LOW);

delay(20000); //Robot pause for a few seconds as I tell everyone he's leaving.
//Ask if he's excited to go home

{
  for(int X=0; X<100; X++) //This is flashing LEDs to show excitement about going.
  {
digitalWrite(GREEN, HIGH);
digitalWrite(RED, LOW);
delay(200);
digitalWrite(GREEN, LOW);
digitalWrite(RED, HIGH);
delay(200);
}
}
digitalWrite(RED, LOW); //turns the LEDs off
digitalWrite(GREEN, LOW);
}

void loop() {
  // put your main code here, to run repeatedly. I don't void loop for this project:
}

```