

```
int fatPin1 = 11;
int fatPin2 = 10;
int fatPin3 = 9;
int relayPin1 = 7;
int relayPin2 = 6;

int pirPin1 = 12;          // pir sensor 1
int pirPin2 = 13;          // pir sensor 2

int fatPinArray[] = {9, 10, 11};
int chosenFatPin = 0;

int relayPinArray[] = {6, 7};
int chosenRelayPin = 0;

int analogNoisePin = 2;    // wire connected for random
int randomNoise = 0;      // store the above

void setup(){
  pinMode(fatPin1, OUTPUT);
  pinMode(fatPin2, OUTPUT);
  pinMode(fatPin3, OUTPUT);

  pinMode(relayPin1, OUTPUT);
  pinMode(relayPin2, OUTPUT);

  pinMode(pirPin1, INPUT);
  pinMode(pirPin2, INPUT);

  Serial.begin(9600);
}

void loop() {
  if (digitalRead(pirPin1) && digitalRead(pirPin2)) {
    megaShow();
  } else if (digitalRead(pirPin1) || digitalRead(pirPin2)) {
    megaHit();
  } else {
    silentNights();
  }

  //printSensors();
  //randomTunes();
  //checkFatRange();
}

void silentNights(){
  randomNoise = analogRead(analogNoisePin);
  //~ Serial.println(randomNoise % 10);
  analogWrite(fatPinArray[chosenFatPin], randomNoise % 30);
  delay(randomNoise % 15);
  digitalWrite(fatPinArray[chosenFatPin], LOW);
  delay(randomNoise % 30);
  if (randomNoise % 12 == 3) delay(1000);

  if (randomNoise % 15 == 3) {
    chosenFatPin++;
    chosenFatPin = chosenFatPin % 3;
  }
}
```

```
void megaHit(){
  int val = 0;
  for(val = 0; val = 15; val++){
    analogWrite(fatPinArray[val % 3], val * 5);
    delay(10);
    digitalWrite(fatPinArray[val % 3], LOW);
    delay(10);
    digitalWrite(relayPinArray[val % 2], HIGH);
    delay(10);
    digitalWrite(relayPinArray[val % 2], LOW);
  }
}
```

```
void megaShow() {
  int val = 0;
  for (val = 50; val < 300; val=val+40){
    analogWrite(fatPin3, val);
    delay(50);
    digitalWrite(fatPin3, LOW);
    delay(220 - val / 2);

    digitalWrite(relayPin2, HIGH);
    delay(50);
    digitalWrite(relayPin2, LOW);
    delay(220 - val / 2);

    analogWrite(fatPin2, val);
    delay(50);
    digitalWrite(fatPin2, LOW);
    delay(220 - val / 2);

    analogWrite(fatPin1, val);
    delay(50);
    digitalWrite(fatPin1, LOW);
    delay(220 - val / 2);

    digitalWrite(relayPin1, HIGH);
    delay(50);
    digitalWrite(relayPin1, LOW);
    delay(220 - val / 2);
  }
}
```

```
void printSensors(){
  Serial.println(digitalRead(pirPin1));
  Serial.println(digitalRead(pirPin2));
  Serial.println(digitalRead(analogNoisePin));
}
```

```
void checkFatRange(){
  int i=0;
  for (i=0; i<200; i++){
    Serial.println(i);
    analogWrite(fatPin1, i);
    delay(50);
    digitalWrite(fatPin1, LOW);
    delay(50);
  }
  // result: 0-200
}
```