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#include <Adafruit_NeoPixel.h>

Adafruit_NeoPixel strip0 = Adafruit_NeoPixel(20, 8, NEO_RGB + NEO_KHZ800);
Adafruit_NeoPixel strip1 = Adafruit_NeoPixel(20, 9, NEO_RGB + NEO_KHZ800);
Adafruit_NeoPixel strip2 = Adafruit_NeoPixel(20, 10, NEO_RGB +
NEO_KHZ800);
Adafruit_NeoPixel strip3 = Adafruit_NeoPixel(20, 11, NEO_RGB +
NEO_KHZ800);

int year = -1;
int yearred = 80;
int yeargreen = 20;
int yearblue = 15;
int month = 0;
int monthposition = random ();
int monthred = 10;
int monthgreen = 80;
int monthblue = 20;
int day = 0;
int wait = 3;
int stripnumber = 0;
int red[80];
int green[80];
int blue[80];
int redstep = -2;
int greenstep = 1;
int bluestep = 2;
int brightness = 0;
//int highred[] = {20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240};
//int highgreen[] = {50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160};
//int highblue[] = {40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95};

void setup()
{
  strip0.begin();
  strip0.show();
  strip1.begin();
  strip1.show();
  strip2.begin();
  strip2.show();
  strip3.begin();
  strip3.show();
  for (int i = 0; i < 80; i++)
  {
```

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    red[i] = 0;
    green[i] = 0;
    blue[i] = 0;
  }
  randomSeed(analogRead(0));
}



 void loop() {

 day++;
 if (day >= 30) {

   day = 0;
 month++;
 if (month >= 12) {
   month = 0;
   monthred = monthred +10 ;
   monthgreen = monthgreen +4;
   monthblue = monthblue +5;

   year++;
   yearred = yearred + redstep;
   if (yearred <= 0) {
     yearred = 0;
     redstep = 3;
    }
   yeargreen = yeargreen + greenstep;
   if (yeargreen >= 255) {
     yeargreen = 255;
     greenstep = +5;
    }
   yearblue = yearblue + bluestep;
   if (yearblue >= 255) {
     yearblue = 255;
     bluestep = -2;
    }

   red[year] = yearred;
   green[year] = yeargreen;
   blue[year] = yearblue;

   for (int i = year+1; i < 80; i++) {
```

```
    red[i] = 0;
    green[i] = 0;
    blue[i] = 0;
  }
 }

 monthposition = random (year+1, 80);
 //monthred = random (30, 160);
 //monthgreen = random (20,150);
 //monthblue = random (10, 140);
 //monthred = highred[month];
 //monthgreen = highgreen[month];
 //monthblue = highblue[month];

 }

 else {
   red[monthposition] = day * monthred/30 ;
   green[monthposition] = day * monthgreen/30 ;
   blue[monthposition] = day * monthblue/30 ;
 }

 for (int i = 0; i < 20; i++) {
   strip0.setPixelColor(i, red[i], green[i], blue[i]);
   strip1.setPixelColor(i, red[i+20], green[i+20], blue[i+20]);
   strip2.setPixelColor(i, red[i+40], green[i+40], blue[i+40]);
   strip3.setPixelColor(i, red[i+60], green[i+60], blue[i+60]);
 }

  strip0.show();
  strip1.show();
  strip2.show();
  strip3.show();
  delay(wait);

}
```