Assignment 3

กลุ่ม ขอบตาดำ ไปก่อนละกัน

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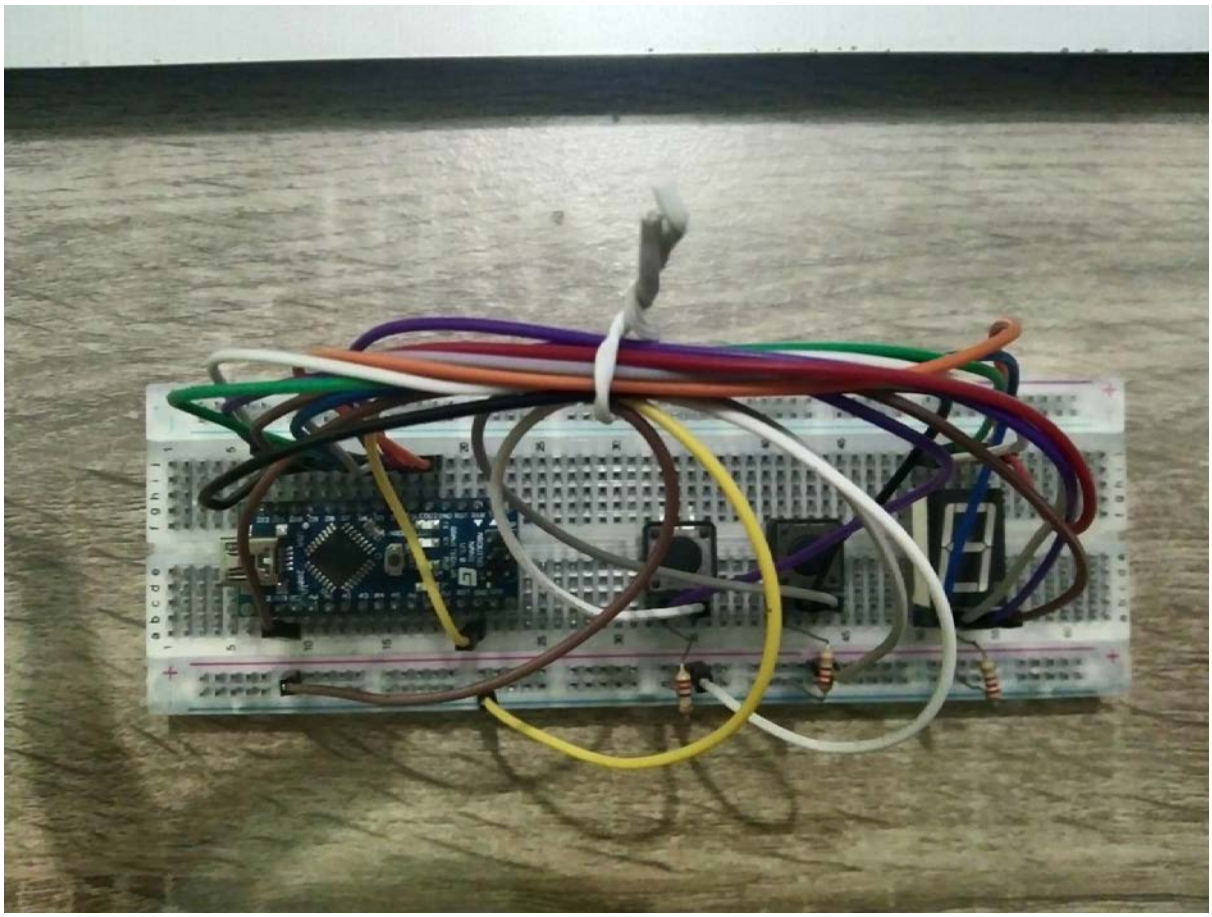
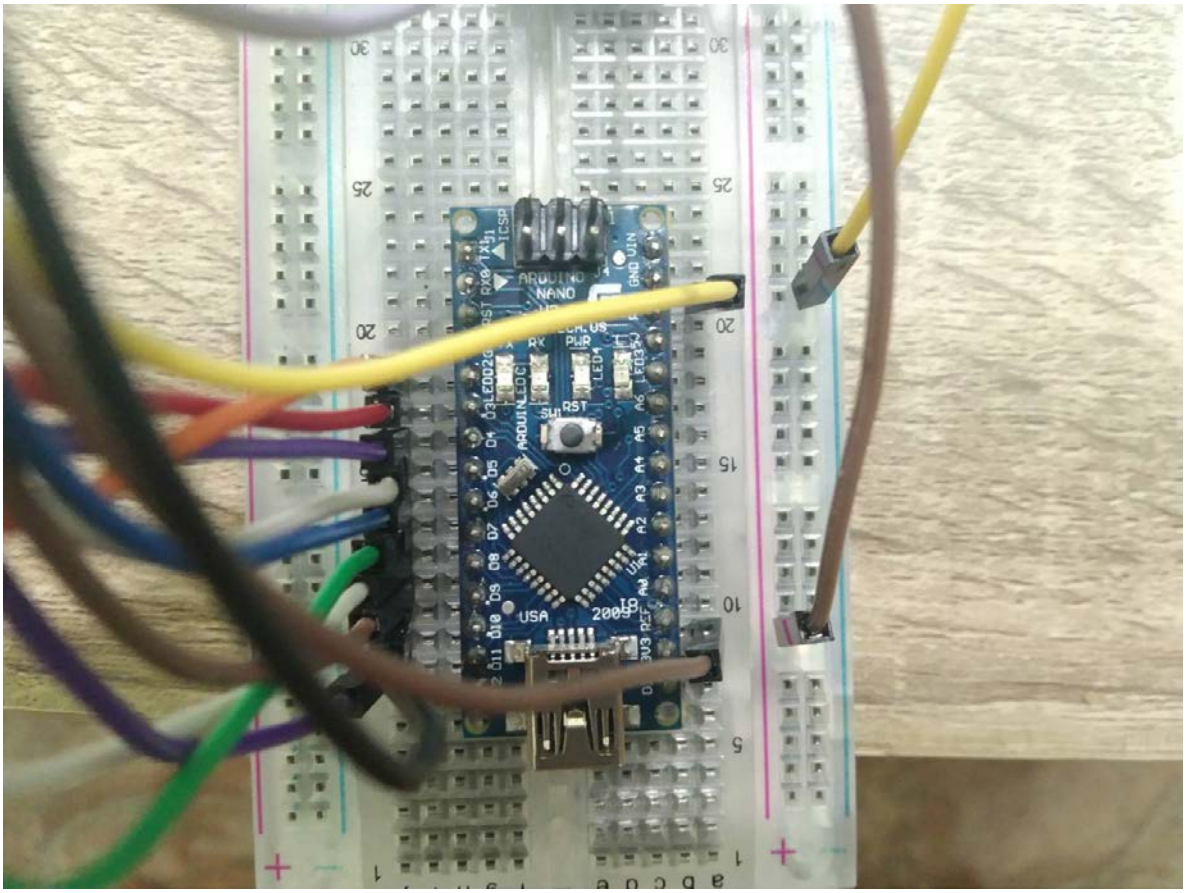
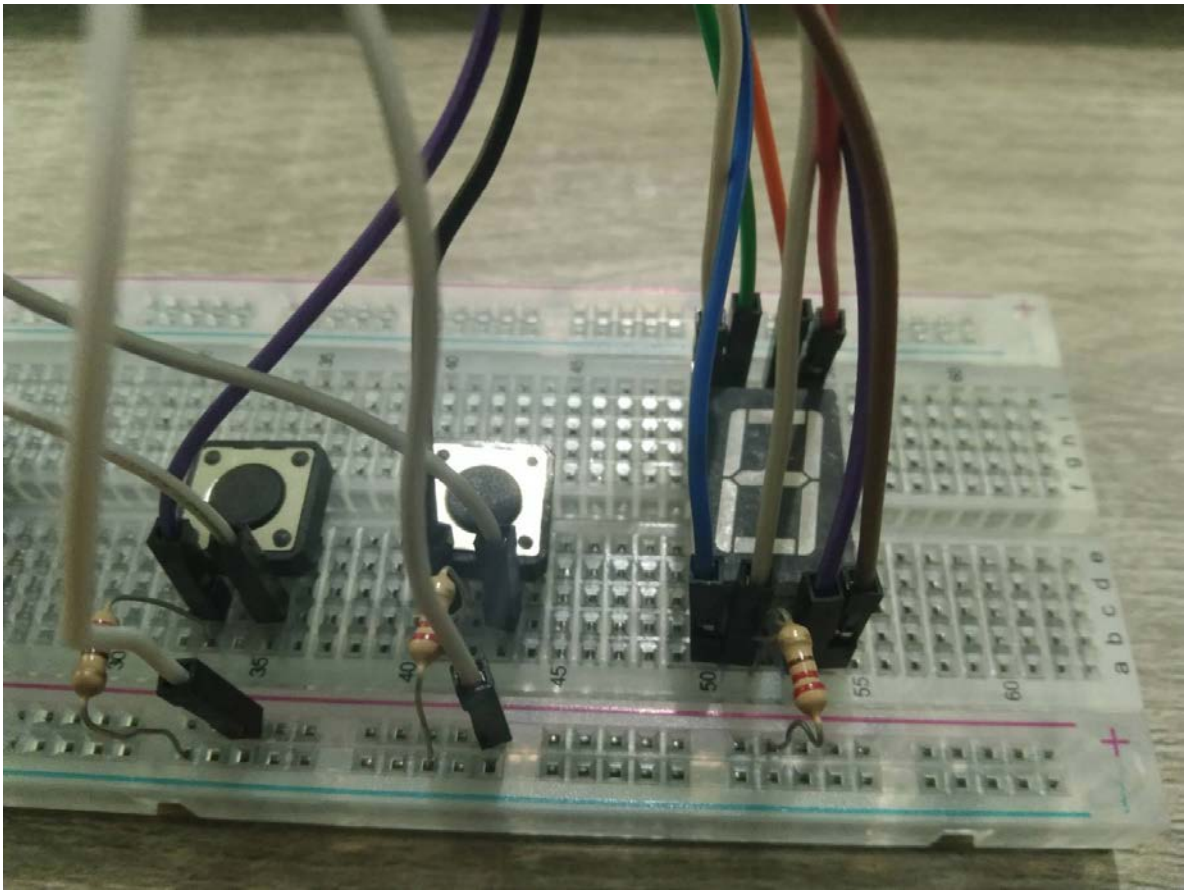
รูปถ่ายชิ้นงาน




ARDUINO
NANO
RST
USA



Source Code

```
int bitPattern [10] = {B11000000, B11111001, B10100100, B10110000,
B10011001, B10010010, B10000010, B11011000, B10000000, B10010000};

const byte numPins = 8;

const int segmentPins[8] = {2, 3, 4, 5, 6, 7, 8, 9};

int a = 1;

int b = 0;

int b2 = 0;

int randomNo;

void setup()

{

  for (int i = 0; i < numPins; i++)

    pinMode(segmentPins[i], OUTPUT);

  pinMode(10, INPUT);

  pinMode(11, INPUT);

  randomSeed(analogRead(A0));

  randomNo = random(1, 10);  }
```

```
void loop()
{
  int ck = digitalRead(10);
  boolean isBitSet;
  if (ck == 1 && b == 0
  {
    b = 1;
    a++;
  }
  else if (ck == 0) b = 0;
  if (a == 10) a = 1;
  for (int segment = 0; segment < 8; segment++)
  {
    isBitSet = bitRead(bitPattern[a], segment);
    digitalWrite(segmentPins[segment], isBitSet);
  }
  watt();
}
```

```
void watt()
{
  boolean isBit;
  boolean SetisBit;
  int ck2 = digitalRead(11);
  if (ck2 == 1 && b2 == 0)
  {
    b2 = 1;
    if (a == randomNo)
    {
      a = 0;
      randomNo = random(1, 10);
    }
    else if (a > randomNo)
    {
      int g = B11000010;
      for (int segment = 0; segment < 8; segment++)
      {
        isBit = bitRead(g, segment);
        digitalWrite(segmentPins[segment], isBit);
```

```
      }
      delay(1000);
    }
    else if (a < randomNo)
    {
      int l = B11000111;
      for (int segment = 0; segment < 8; segment++)
      {
        SetisBit = bitRead(l, segment);
        digitalWrite(segmentPins[segment], SetisBit);
      }
      delay(1000);
    }
  }
  else if (ck2 == 0) b2 = 0;
}
```