Week .7 :   **7 Segment**   23.10.2022
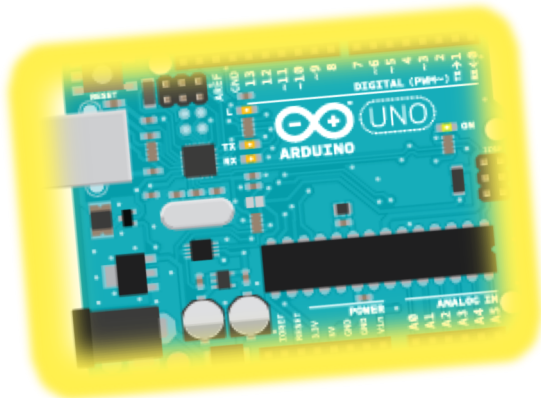
7 Segment

Exercise .1
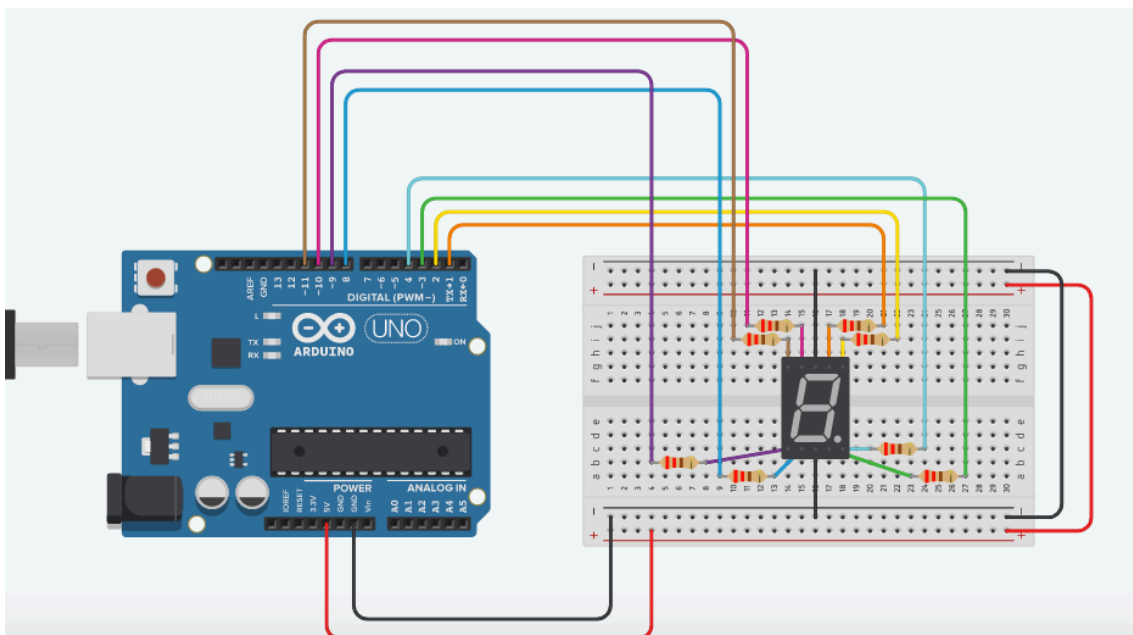
Exercise.1 Source Code

```cpp
int seg_a = 1;
int seg_b = 2;
int seg_c = 3;
int seg_dp = 4;
int seg_d = 8;
int seg_e = 9;
int seg_f = 10;
int seg_g = 11;
void setup()
{
  pinMode(seg_dp, OUTPUT);
  pinMode(seg_a, OUTPUT);
  pinMode(seg_b, OUTPUT);
  pinMode(seg_c, OUTPUT);
  pinMode(seg_d, OUTPUT);
  pinMode(seg_e, OUTPUT);
  pinMode(seg_f, OUTPUT);
  pinMode(seg_g, OUTPUT);
}
void loop()
{
  number_1();
  delay(1000);
  clear();
  delay(1000);
}
```

```cpp
//. CLEAR 7 SEGMENT
void clear()
{
  digitalWrite(seg_a, LOW);
  digitalWrite(seg_b, LOW);
  digitalWrite(seg_c, LOW);
  digitalWrite(seg_dp, LOW);
  digitalWrite(seg_d, LOW);
  digitalWrite(seg_e, LOW);
  digitalWrite(seg_f, LOW);
  digitalWrite(seg_g, LOW);
}

//. NUMBER 1
void number_1()
{
  digitalWrite(seg_a, LOW);
  digitalWrite(seg_b, HIGH);
  digitalWrite(seg_c, HIGH);
  digitalWrite(seg_dp, LOW);
  digitalWrite(seg_d, LOW);
  digitalWrite(seg_e, LOW);
  digitalWrite(seg_f, LOW);
  digitalWrite(seg_g, LOW);
}
```

Add the Potentiometer for your project and display the number 0 to 9 on 7 Segment as the following

If PM value:

0 – 50	display number 0 on 7 segment
05 – 100	display number 1 on 7 segment
100 – 150	display number 2 on 7 segment
150 – 200	display number 3 on 7 segment
200 – 250	display number 4 on 7 segment
250 – 300	display number 5 on 7 segment
300 – 350	display number 6 on 7 segment
350 – 400	display number 7 on 7 segment
400 – 450	display number 8 on 7 segment
450 – 500	display number 9 on 7 segment

Assignment:

Design a project for creating the clock by using (3) 7 Segments