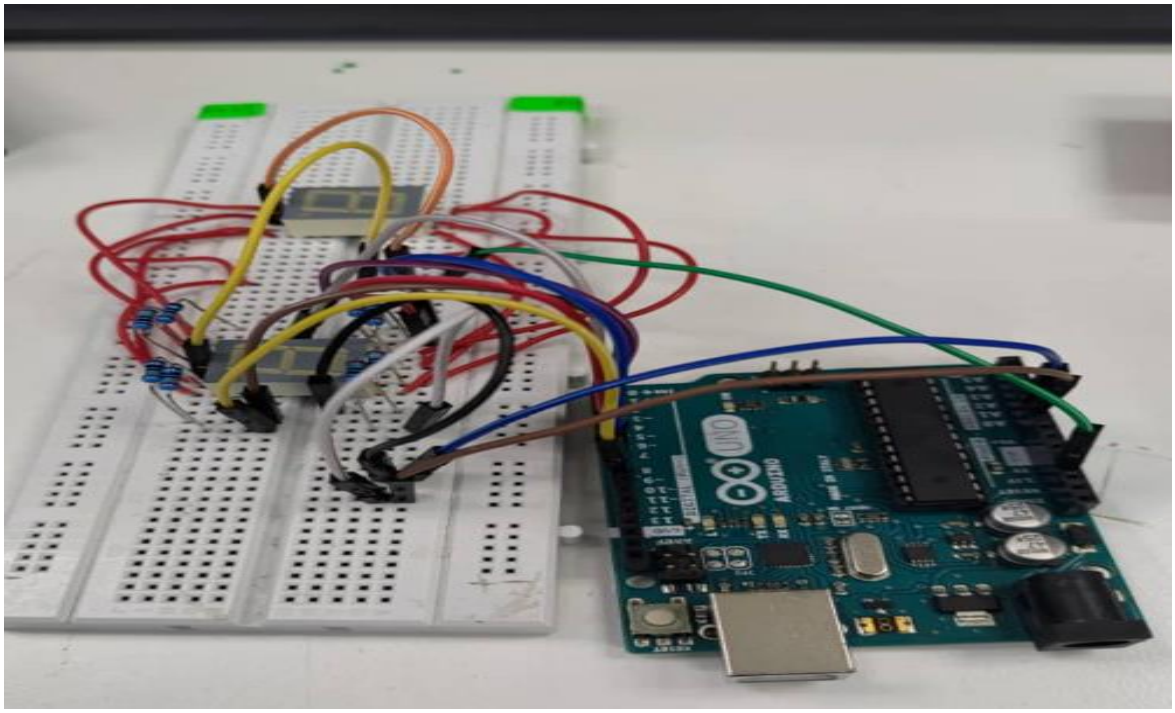
Tester 7-Segment Display:

- Refer to the MCP6292 KiCAD(PRIMARY FILE) for the circuit diagram for the whole connection include the other Tester circuit.
- Below show the prototype on how the wire were connected and the possible result for this circuit
- Also it show what the component that are include in this project and can be see also the connection and pin(analog and digital) that used.
- This pin is randomly choose and will use to insert/include in Arduino for the coding process to effect the result testing on several part of 7 segment display.
- This is the pin list that we use:
  - Analog In (A1,A2)
  - Digital (4,5,6,7,8,9)
- This project consist of 8 resistor (220 ohm) that connected between the 7 display pin and the Arduino Pinout.



2nd Procedure:

Arduino Code for 7 Segment Display Tester:

```
#define A A1
#define B A0
#define C 4
#define D 5
#define E 6
#define F 7
#define G 8
#define DP 9

void setup() {

  pinMode (A, OUTPUT);
  pinMode (B, OUTPUT);
  pinMode (C, OUTPUT);
  pinMode (D, OUTPUT);
  pinMode (E, OUTPUT);
  pinMode (F, OUTPUT);
  pinMode (G, OUTPUT);
  pinMode (DP, OUTPUT);
}

void loop() {
  zero();
  delay(300);
  one();
  delay(300);
  two();
  delay(300);
  three();
  delay(300);
  four();
  delay(300);
  five();
  delay(300);
  six();
  delay(300);
  seven();
  delay(300);
  eight();
  delay(300);
  nine();
  delay(300);
  titik();
  delay(300);
```

```
}

void zero()
{
 digitalWrite (A, LOW);
 digitalWrite (B, LOW);
 digitalWrite (C, LOW);
 digitalWrite (D, LOW);
 digitalWrite (E, LOW);
 digitalWrite (F, LOW);
 digitalWrite (G, HIGH);
 digitalWrite (DP, HIGH);
}

void one()
{
 digitalWrite (A, HIGH);
 digitalWrite (B, LOW);
 digitalWrite (C, LOW);
 digitalWrite (D, HIGH);
 digitalWrite (E, HIGH);
 digitalWrite (F, HIGH);
 digitalWrite (G, HIGH);
 digitalWrite (DP, HIGH);
}

void two()
{
 digitalWrite (A, LOW);
 digitalWrite (B, LOW);
 digitalWrite (C, HIGH);
 digitalWrite (D, LOW);
 digitalWrite (E, LOW);
 digitalWrite (F, HIGH);
 digitalWrite (G, LOW);
 digitalWrite (DP, HIGH);
}

void three()
{
 digitalWrite (A, LOW);
 digitalWrite (B, LOW);
 digitalWrite (C, LOW);
 digitalWrite (D, LOW);
 digitalWrite (E, HIGH);
 digitalWrite (F, HIGH);
 digitalWrite (G, LOW);
 digitalWrite (DP, HIGH);
```

```
}

void four()
{
 digitalWrite (A, HIGH);
 digitalWrite (B, LOW);
 digitalWrite (C, LOW);
 digitalWrite (D, HIGH);
 digitalWrite (E, HIGH);
 digitalWrite (F, LOW);
 digitalWrite (G, LOW);
 digitalWrite (DP, HIGH);
}

void five()
{
 digitalWrite (A, LOW);
 digitalWrite (B, HIGH);
 digitalWrite (C, LOW);
 digitalWrite (D, LOW);
 digitalWrite (E, HIGH);
 digitalWrite (F, LOW);
 digitalWrite (G, LOW);
 digitalWrite (DP, HIGH);
}

void six()
{
 digitalWrite (A, LOW);
 digitalWrite (B, HIGH);
 digitalWrite (C, LOW);
 digitalWrite (D, LOW);
 digitalWrite (E, LOW);
 digitalWrite (F, LOW);
 digitalWrite (G, LOW);
 digitalWrite (DP, HIGH);
}

void seven()
{
 digitalWrite (A, LOW);
 digitalWrite (B, LOW);
 digitalWrite (C, LOW);
 digitalWrite (D, HIGH);
 digitalWrite (E, HIGH);
 digitalWrite (F, HIGH);
 digitalWrite (G, HIGH);
 digitalWrite (DP, HIGH);
```

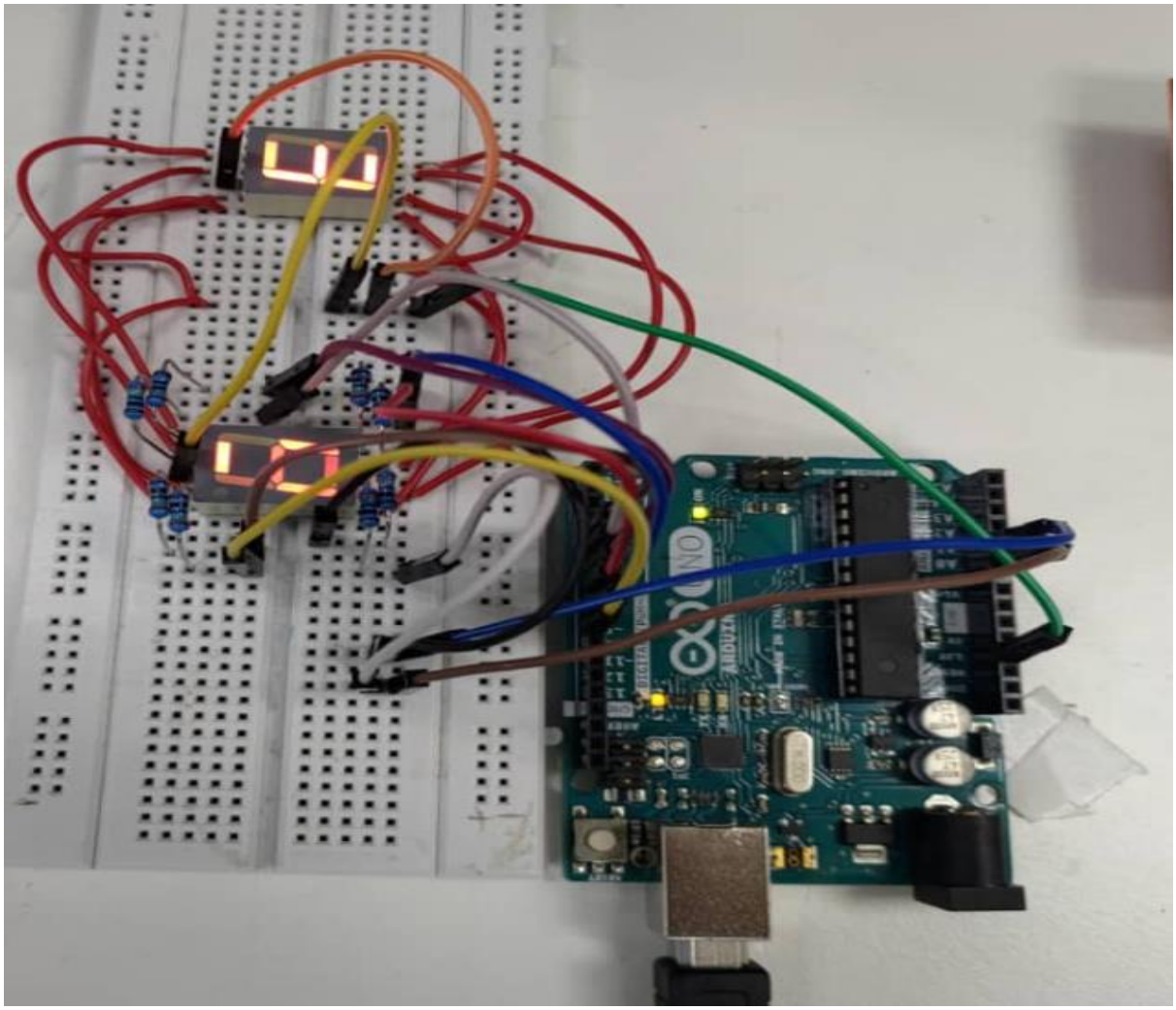
```
}

void eight()
{
  digitalWrite (A, LOW);
  digitalWrite (B, LOW);
  digitalWrite (C, LOW);
  digitalWrite (D, LOW);
  digitalWrite (E, LOW);
  digitalWrite (F, LOW);
  digitalWrite (G, LOW);
  digitalWrite (DP, HIGH);
}

void nine()
{
  digitalWrite (A, LOW);
  digitalWrite (B, LOW);
  digitalWrite (C, LOW);
  digitalWrite (D, LOW);
  digitalWrite (E, HIGH);
  digitalWrite (F, LOW);
  digitalWrite (G, LOW);
  digitalWrite (DP, HIGH);
}
void titik()
{
  digitalWrite (A, HIGH);
  digitalWrite (B, HIGH);
  digitalWrite (C, HIGH);
  digitalWrite (D, HIGH);
  digitalWrite (E, HIGH);
  digitalWrite (F, HIGH);
  digitalWrite (G, HIGH);
  digitalWrite (DP, LOW);
}
```

Third Procedure:

- After done with code Arduino. This is what is looks like with the sample prototype done:
- In this image capture, customize the tester into 2 placement for the tester with the same output but double result.



Can proceed to fabricated and put on the component on to the cirucuit..