

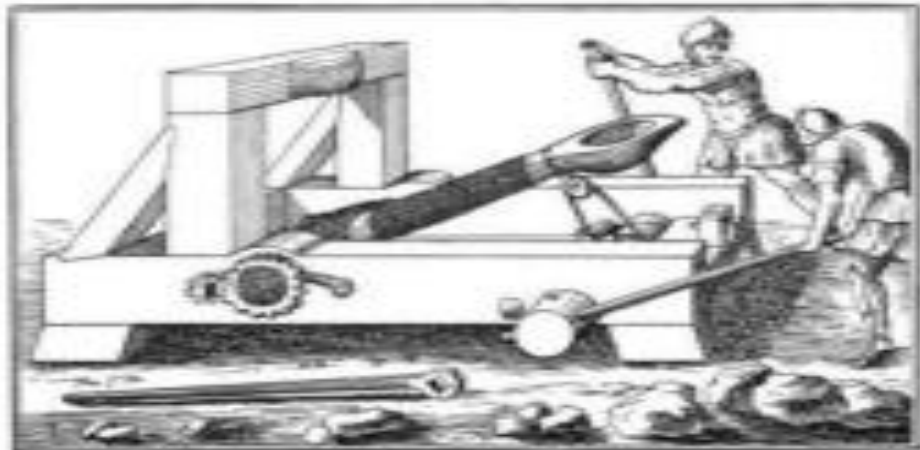


**DEPARTMENT
OF
ELECTRONICS AND COMMUNICATION ENGINEERING**



THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Deemed to be University)

**Handout/Assignment-
for
Engineering Design Project-I (UTA013)**



Name: Hardik Verma

Roll No: 102283044

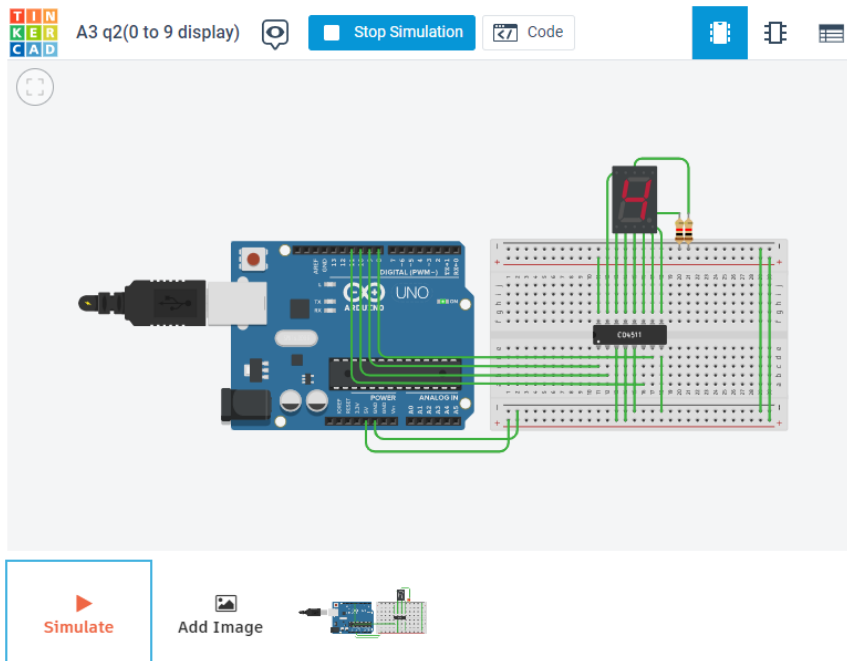
Group: 2CO28

Lab Group: 2



Assignment Tasks:

1. Use Tinkercad to redesign Exercise 2 and display the last digit of your Roll Number on the 7-segment display.



design by:
hverma50_be22

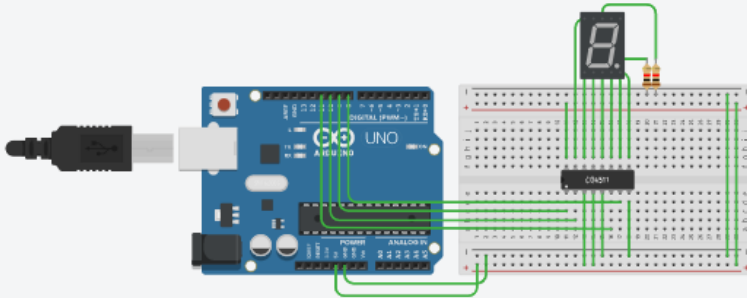
Edited 10/11/22, Created 10/11/22

Tinker this





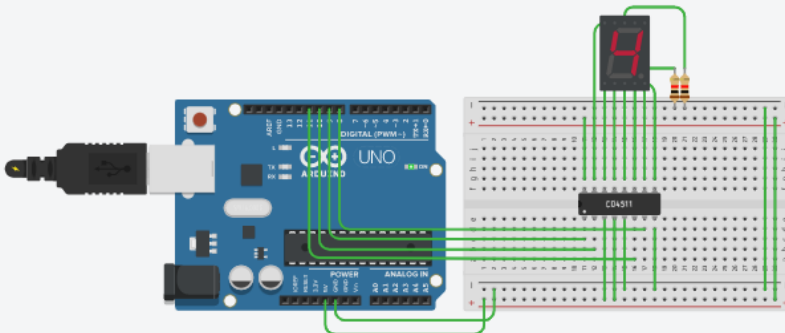
CODE:



```

1  int n=4;
2  int a,b,c,d;
3  void setup()
4  { pinMode(8, OUTPUT);
5    pinMode(9, OUTPUT);
6    pinMode(10, OUTPUT);
7    pinMode(11, OUTPUT);
8  }
9  void loop()
10 {
11   n=4;
12   a=n%2;
13   b=(n/2)%2;
14   c=(n/4)%2;
15   d=(n/8)%2;
16   if(a==HIGH){
17     digitalWrite(8,HIGH);
18   }
19   else{
20     digitalWrite(8,LOW);
21   }
22   if(b==HIGH){
23     digitalWrite(9,HIGH);
24   }
25   else{
26     digitalWrite(9,LOW);
27   }
28   if(c==HIGH){

```



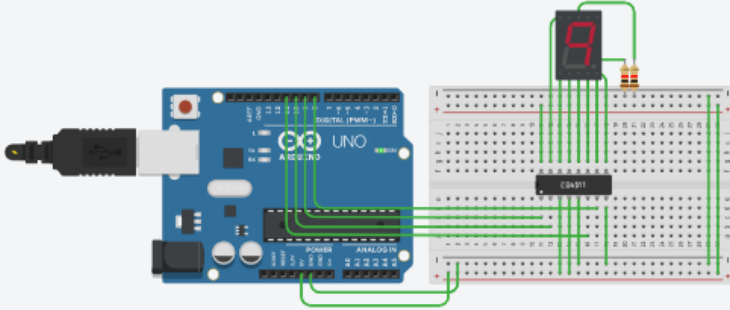
```

14   c=(n/4)%2;
15   d=(n/8)%2;
16   if(a==HIGH){
17     digitalWrite(8,HIGH);
18   }
19   else{
20     digitalWrite(8,LOW);
21   }
22   if(b==HIGH){
23     digitalWrite(9,HIGH);
24   }
25   else{
26     digitalWrite(9,LOW);
27   }
28   if(c==HIGH){
29     digitalWrite(10,HIGH);
30   }
31   else{
32     digitalWrite(10,LOW);
33   }
34   if(d==HIGH){
35     digitalWrite(11,HIGH);
36   }
37   else{
38     digitalWrite(11,LOW);
39   }
40   delay(1000);
41 }

```



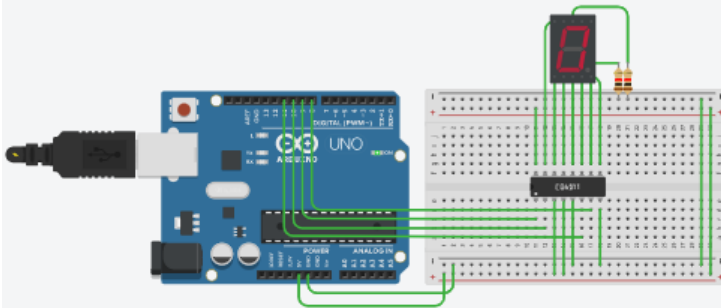

CODE:



```

1  int n;
2  int a,b,c,d;
3  void setup()
4  { pinMode(8, OUTPUT);
5    pinMode(9, OUTPUT);
6    pinMode(10, OUTPUT);
7    pinMode(11, OUTPUT);
8  }
9  void loop()
10 {
11   for(int i=0;i<=9;i++){
12     n=i;
13     a=n%2;
14     b=(n/2)%2;
15     c=(n/4)%2;
16     d=(n/8)%2;
17     if(a==HIGH){
18       digitalWrite(8,HIGH);
19     }
20     else{
21       digitalWrite(8,LOW);
22     }
23     if(b==HIGH){
24       digitalWrite(9,HIGH);
25     }
26     else{
27       digitalWrite(9,LOW);
28     }

```



```

16     d=(n/8)%2;
17     if(a==HIGH){
18       digitalWrite(8,HIGH);
19     }
20     else{
21       digitalWrite(8,LOW);
22     }
23     if(b==HIGH){
24       digitalWrite(9,HIGH);
25     }
26     else{
27       digitalWrite(9,LOW);
28     }
29     if(c==HIGH){
30       digitalWrite(10,HIGH);
31     }
32     else{
33       digitalWrite(10,LOW);
34     }
35     if(d==HIGH){
36       digitalWrite(11,HIGH);
37     }
38     else{
39       digitalWrite(11,LOW);
40     }
41     delay(1000);
42   }
43 }

```