

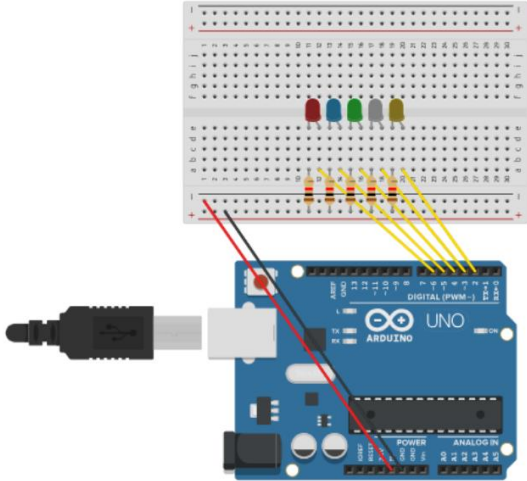
Assignment 1-A (5 LED BLINKER)

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Private

React 0

5 LED BLINKER



Simulate

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TINKER CAD

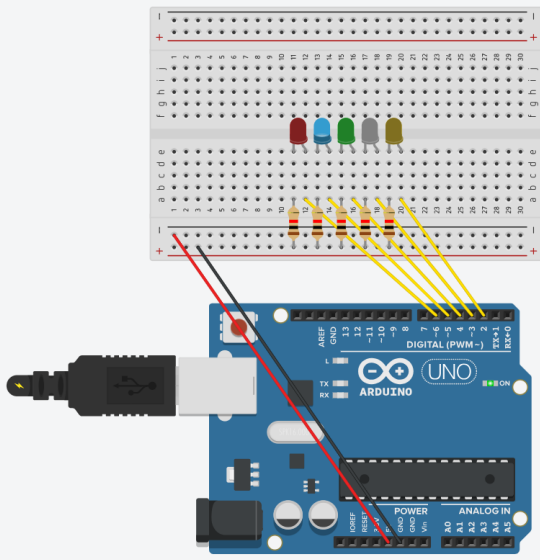
5 LED BLINKER

Saved

1 (Arduino Uno R3)

Simulator time: 00:00:06

Code Stop Simulation Send To



Serial Monitor

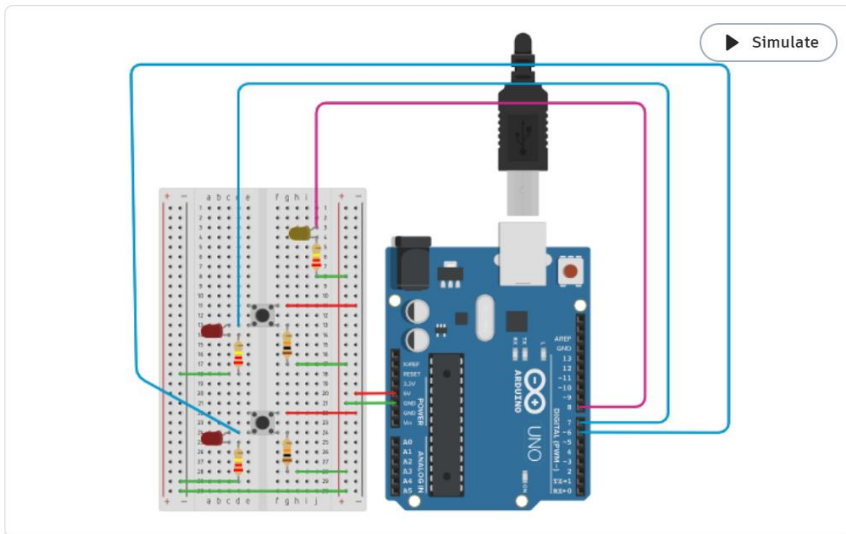
```
1 void setup()
2 {
3   pinMode(2, OUTPUT);
4   pinMode(3, OUTPUT);
5   pinMode(4, OUTPUT);
6   pinMode(5, OUTPUT);
7   pinMode(6, OUTPUT);
8 }
9 void loop()
10 {
11   digitalWrite(2, HIGH);
12   delay(1000);
13   digitalWrite(2, LOW);
14   delay(1000);
15   digitalWrite(3, HIGH);
16   delay(1000);
17   digitalWrite(3, LOW);
18   delay(1000);
19   digitalWrite(4, HIGH);
20   delay(1000);
21   digitalWrite(4, LOW);
22   delay(1000);
23   digitalWrite(5, HIGH);
24   delay(1000);
25   digitalWrite(5, LOW);
26   delay(1000);
27   digitalWrite(6, HIGH);
28   delay(1000);
29   digitalWrite(6, LOW);
30   delay(1000);
31 }
32 }
```

Assignment 1-B (VERIFICATION OF GATES)

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AND ,NAND and XOR gates



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```
1 //AND GATE
2 void setup()
3 {
4   pinMode(6, INPUT);
5   pinMode(7, INPUT);
6   pinMode(8, OUTPUT);
7 }
8
9 void loop()
10 {
11   if (digitalRead(7)==1 && digitalRead(6)==1)
12     digitalWrite(8,HIGH);
13 }
14 else{
15   digitalWrite(8,LOW);
16 }
17 }
```

```
1 //XOR gate
2 void setup()
3 {
4   pinMode(6, INPUT);
5   pinMode(7, INPUT);
6   pinMode(8, OUTPUT);
7 }
8
9 void loop() {
10   int x=digitalRead(7);
11   int y=digitalRead(6);
12
13   if (x==y){
14     digitalWrite(8,LOW);
15   }
16   else{
17     digitalWrite(8,HIGH);
18   }
19 }
```

```
1 //NAND GATE
2 void setup()
3 {
4   pinMode(6, INPUT);
5   pinMode(7, INPUT);
6   pinMode(8, OUTPUT);
7 }
8
9 void loop()
10 {
11   if (digitalRead(7)==1 && digitalRead(6)==1){
12     digitalWrite(8,LOW);
13   }
14   else{
15     digitalWrite(8,HIGH);
16   }
17 }z
```

Assignment 2-A (TRUTH TABLE VERIFICATION OF IC 74HC08 and IC 74HC73)

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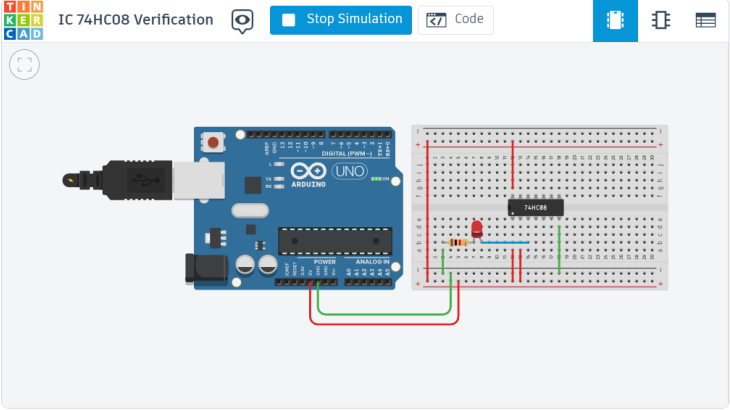
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React 0

IC 74HC08 Verification

Stop Simulation

Code



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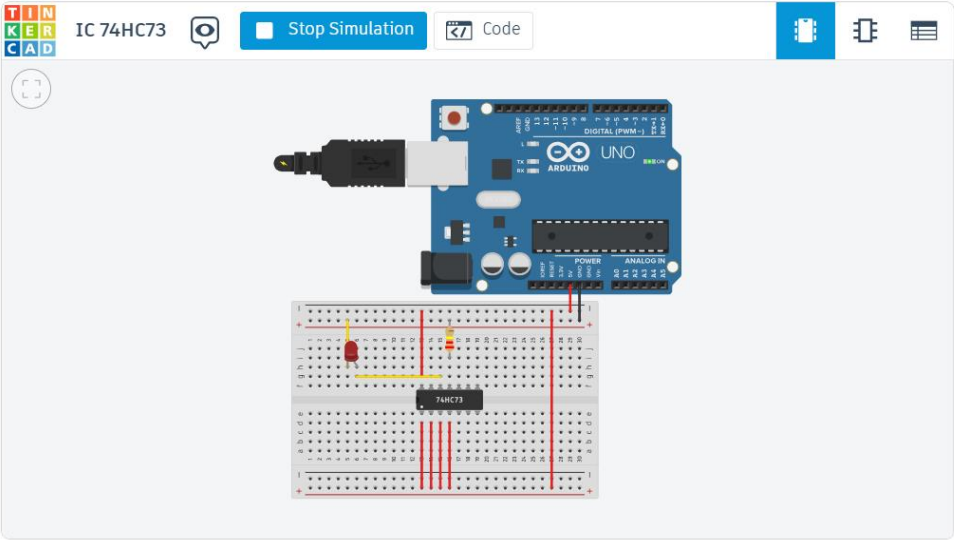
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React 0

IC 74HC73

Stop Simulation

Code



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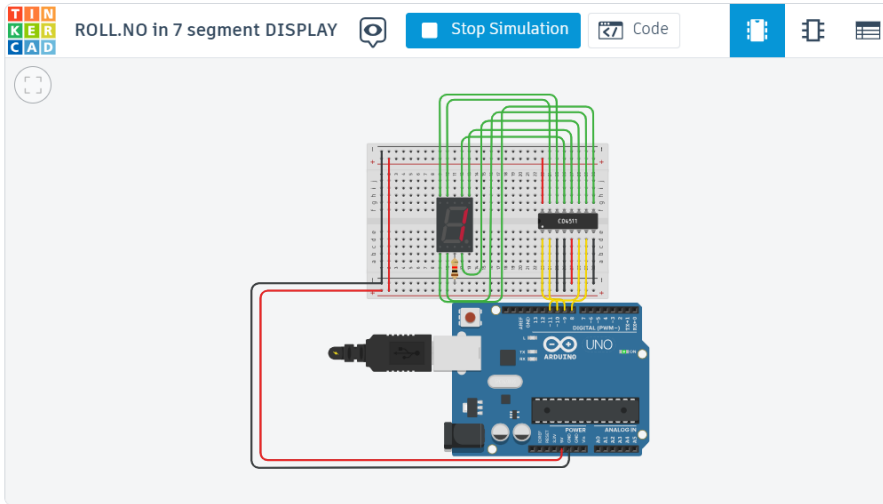
Assignment 3-A (LAST DIGIT OF ROLL NUMBER)

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[Private](#) [Settings](#)

React [Heart](#) 0

ROLL.NO in 7 segment DISPLAY



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ROLL.NO in 7 segment DISPLAY

All changes saved

1 (Arduino Uno R3)

```
1
2 void setup()
3 {
4   pinMode(8,OUTPUT);
5   pinMode(9,OUTPUT);
6   pinMode(10,OUTPUT);
7   pinMode(11,OUTPUT);
8 }
9
10 void loop()
11 {
12   //ROLL NO 102317031
13   digitalWrite(8, 1);
14   digitalWrite(9, 0);
15   digitalWrite(10,0);
16   digitalWrite(11,0);
17
18
19
20 }
```

Assignment 3-B (ONE DISPLAY COUNTER)

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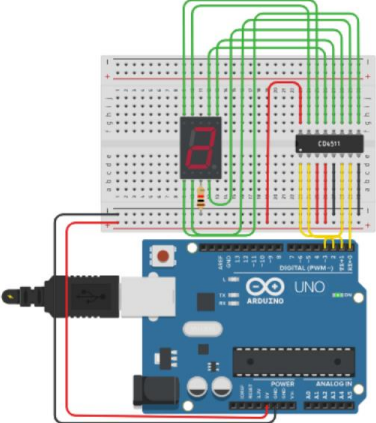
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COUNTER TILL 9

Private

React 0

Simulate



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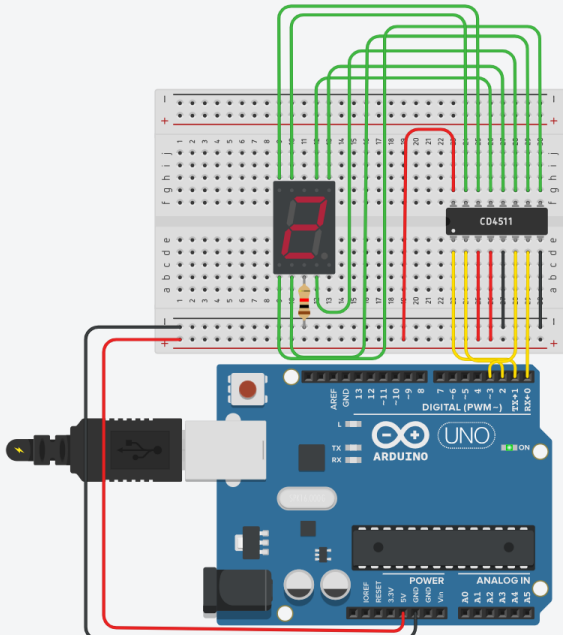
TINKER CAD COUNTER TILL 9

All changes saved

Simulator time: 00:00:02

Code Stop Simulation Send To

1 (Arduino Uno R3)



```
1 void setup()
2 {
3   pinMode(0, OUTPUT);
4   pinMode(1, OUTPUT);
5   pinMode(2, OUTPUT);
6   pinMode(3, OUTPUT);
7 }
8 int num[10][4] =
9 {
10
11   //(A, B, C, D),
12   {0, 0, 0, 0}, //0
13   {1, 0, 0, 0}, //1
14   {0, 1, 0, 0}, //2
15   {1, 1, 0, 0}, //3
16   {0, 0, 1, 0}, //4
17   {1, 0, 1, 0}, //5
18   {0, 1, 1, 0}, //6
19   {1, 1, 1, 0}, //7
20   {0, 0, 0, 1}, //8
21   {1, 0, 0, 1}, //9
22 }
23 };
24 void loop()
25 {
26   for(int i=0; i<10; i++)
27   {
28     for(int j=0; j<4; j++){
29       digitalWrite(j, num[i][j]);
30     }
31     delay(1000);
32   }
33 }
34
35
36
37
38
39
```

Serial Monitor