Continuous Assessment – 1

20181CSE0621

Sai Ram. K

6 - CSE - 10

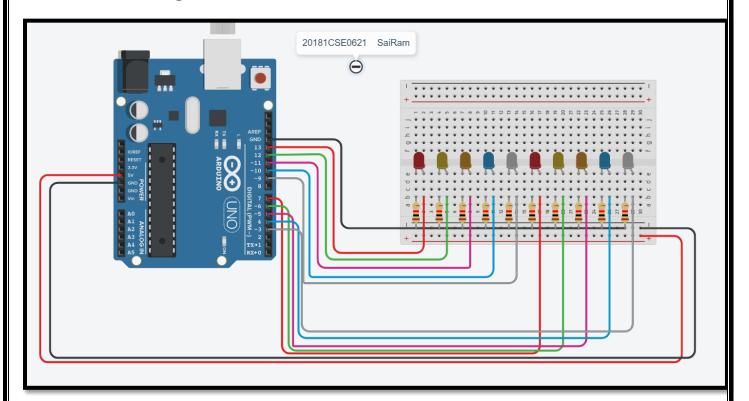
Set - C

Question: Write a sketch to blink an 10 leds front to back and back to front and simulate using tinker cadd tool.

Aim: To blink 10 LEDs forward and backward and simulate using TinkerCad.

<u>Components Required</u>: Arduino, Bread board, 10 resistors, 10 LEDs and sufficient jumper wires.

Initial Circuit Design:



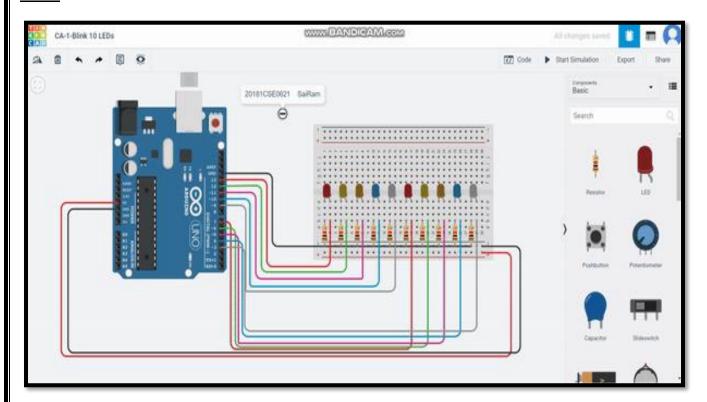
Sketch:

```
int pins[] = {13,12,11,10,9,7,6,5,4,3};
void setup()
{
   for(int i=0;i<10;i++){</pre>
```

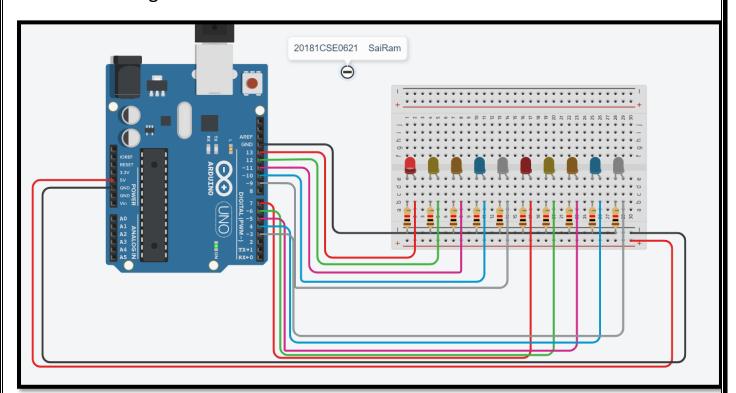
```
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        pinMode(pins[i], OUTPUT);
 }
 Serial.begin(9600);
}
void loop()
{
       for(int i=0;i<10;i++)
   digitalWrite(pins[i],HIGH);
   delay(500);
   digitalWrite(pins[i],LOW);
   delay(1000);
  }
       Serial.println("Forward Blinking Completed....");
       for(int i=10;i!=-1;i--)
   digitalWrite(pins[i],HIGH);
   delay(500);
   digitalWrite(pins[i],LOW);
   delay(1000);
  }
       Serial.println("Backward Blinking Completed....");
}
```

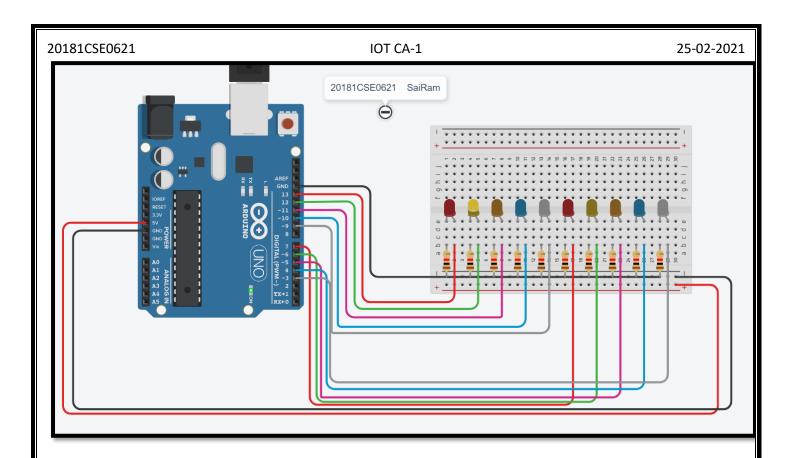
Output Screenshots:

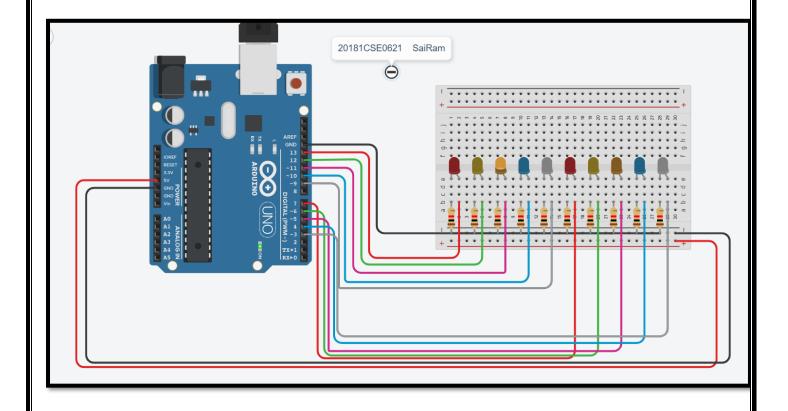
GIF:

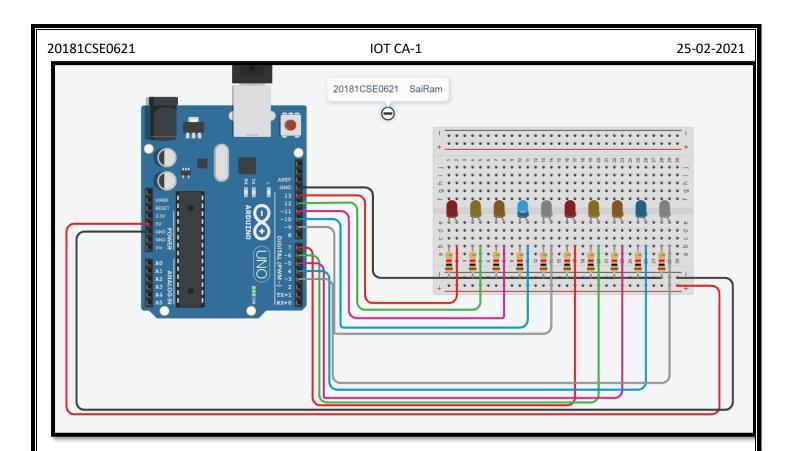


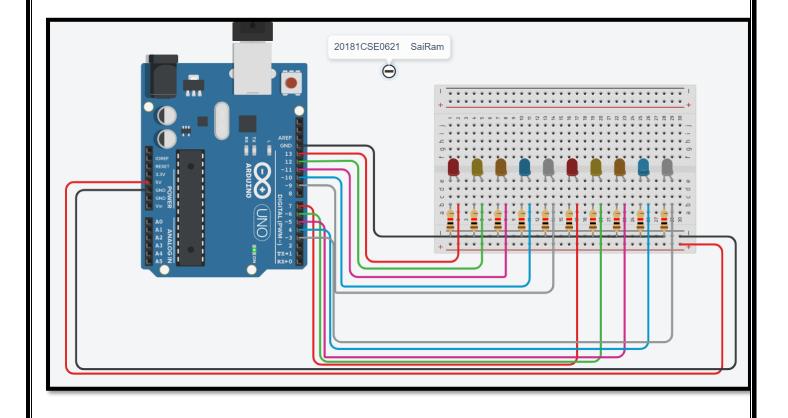
Forward Blinking:

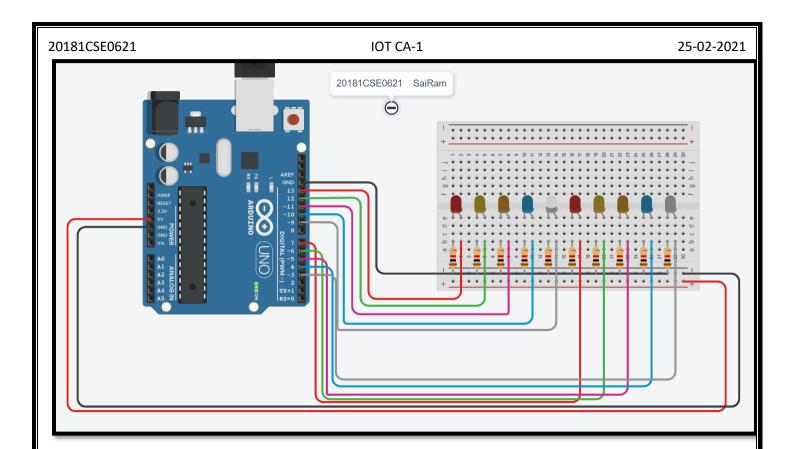


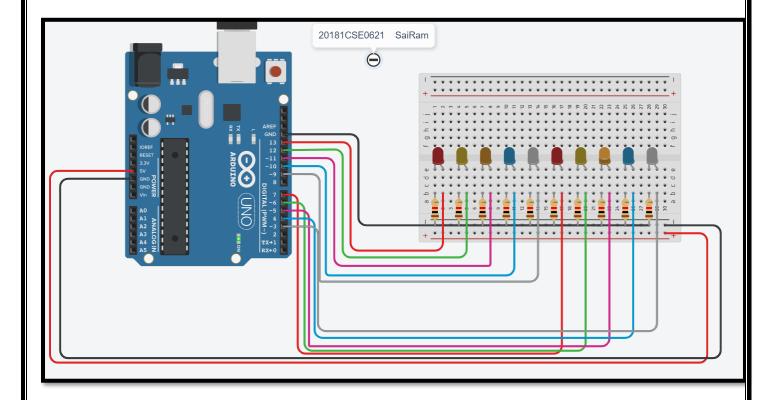




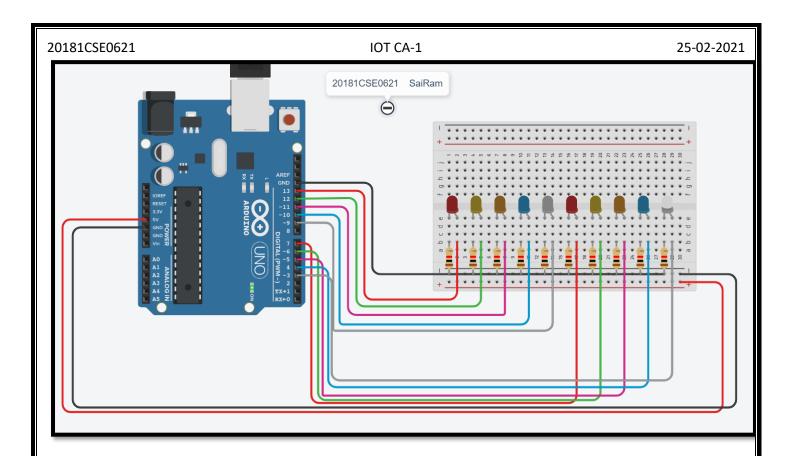


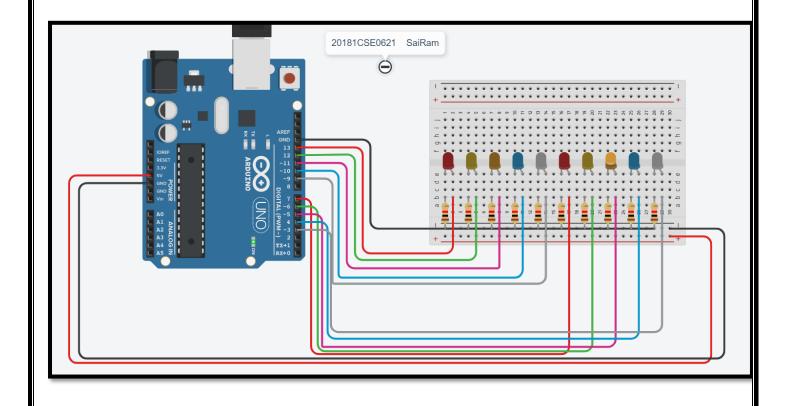


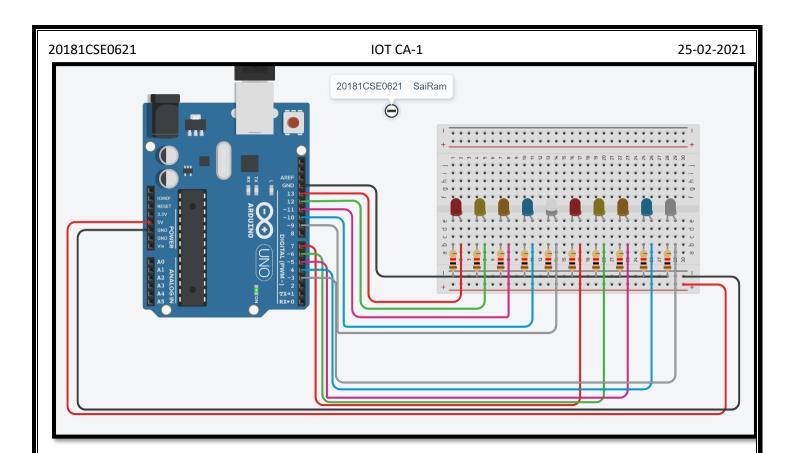




Backward Blinking:







Serial Monitor Output:

