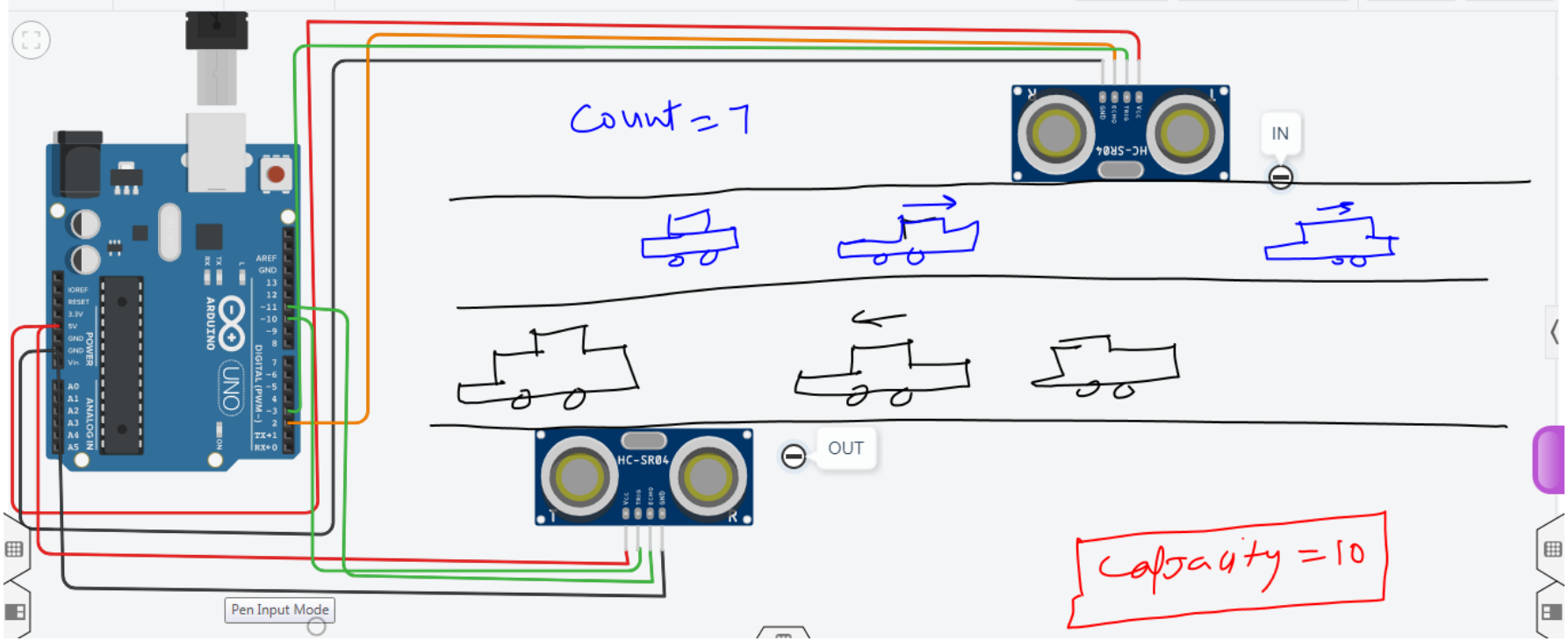
//Smart Car Parking system



Code:

```
//Smart Car Parking system

int durationIn;

long distanceIn;

int durationOut;

long distanceOut;

int flagIn = 1;

int flagOut = 1;

int count =0;

void setup()

{

  pinMode(2, INPUT);
```

```
  pinMode(3, OUTPUT);
  pinMode(11, INPUT);
  pinMode(10, OUTPUT);
  Serial.begin(9600);
}
void loop()
{
  // triger In
  digitalWrite(3, LOW);
  delayMicroseconds(2);
 // triger In
  digitalWrite(3,HIGH);
```

```
delayMicroseconds(10);

digitalWrite(3, LOW);

 // Distance In

durationIn = pulseIn (2,HIGH);

distanceIn = durationIn * 0.034 / 2 ;

//In Logic

if(distanceIn<150 && flagIn == 1 )

{

      count++;

      flagIn = 0;

}

if(distanceIn > 150)
```

```
      flagIn = 1;

  // triger Out

digitalWrite(10, LOW);

delayMicroseconds(2);

// triger Out

digitalWrite(10,HIGH);

delayMicroseconds(10);

digitalWrite(10, LOW);

// Distance Out

durationOut = pulseIn (11,HIGH);

distanceOut = durationOut * 0.034 / 2 ;
```

```
  //Out Logic
  if(distanceOut<150 && flagOut == 1 )
  {
        count--;
        flagOut = 0;
  }
  if(distanceOut > 150)
        flagOut = 1;
  Serial.print("Count ");
  Serial.println(count);

}
```