

SMARTBRIDGE EXTERNSHIP

WEEKLY ASSIGNMENT 1

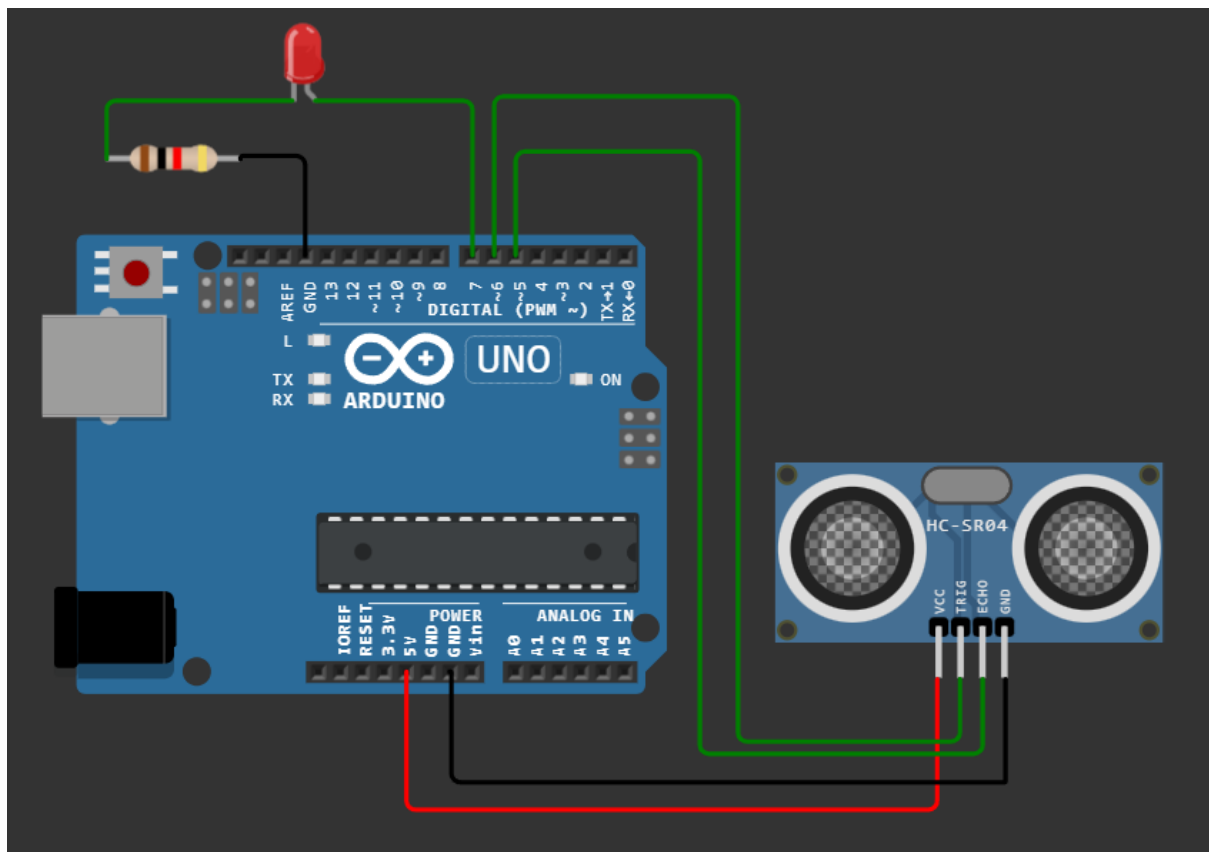
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20BEC1201

TASK

In Wokwi, if the distance is less than 100 cms for ultrasonic sensor, glow a LED

CIRCUIT DIAGRAM:



CODE:

```
void setup() {  
  pinMode(7,OUTPUT);  
  pinMode(5,INPUT);  
  pinMode(6, OUTPUT);  
  Serial.begin(9600);
```

```
}
```

```
void loop() {
```

```
    digitalWrite(6,LOW);
```

```
    digitalWrite(6,HIGH);
```

```
    delayMicroseconds(10);
```

```
    digitalWrite(6,LOW);
```

```
    digitalWrite(5,HIGH);
```

```
    float dur = pulseIn(5,HIGH);
```

```
    float dis = 0.034*(dur/2);
```

```
    Serial.println(dis);
```

```
    if (dis < 100)
```

```
    {
```

```
        digitalWrite(7, HIGH);
```

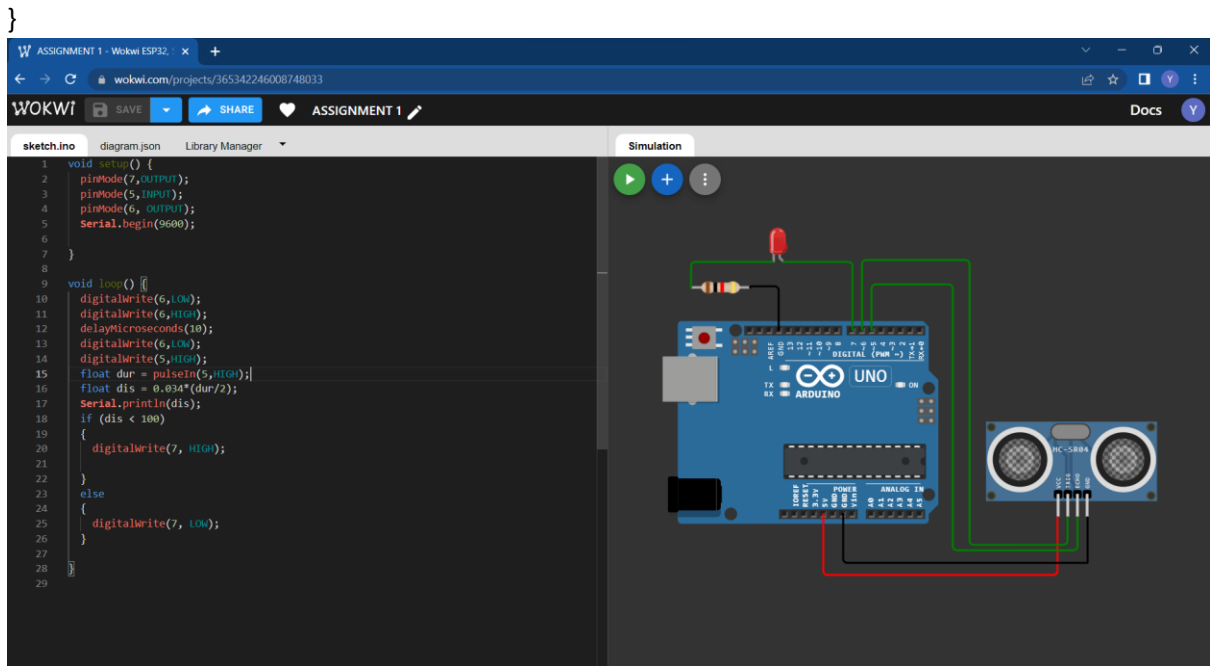
```
    }
```

```
    else
```

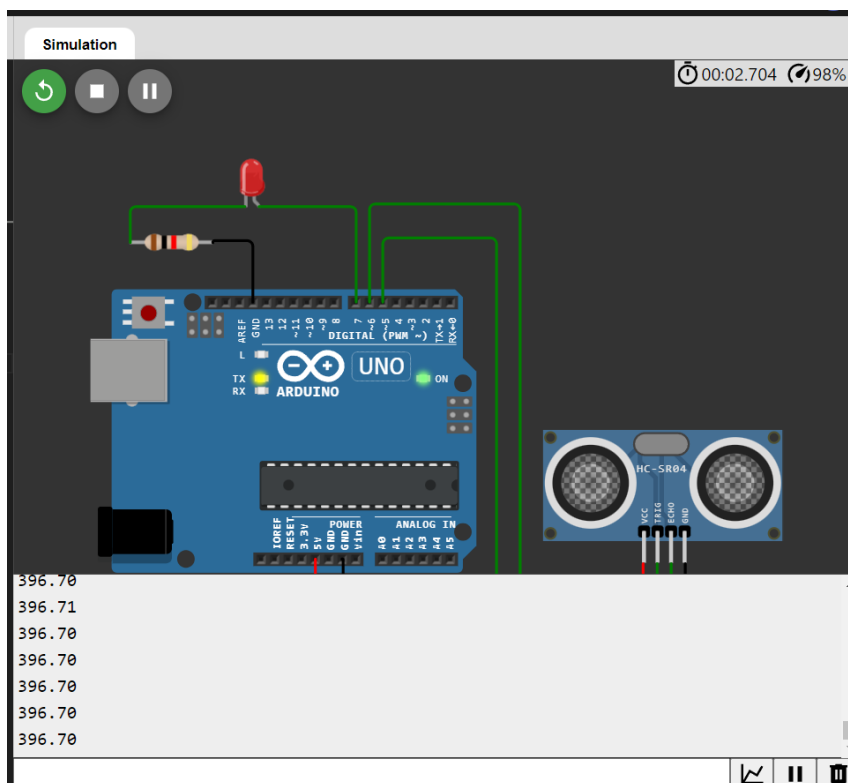
```
    {
```

```
        digitalWrite(7, LOW);
```

```
    }
```



OUTPUT:

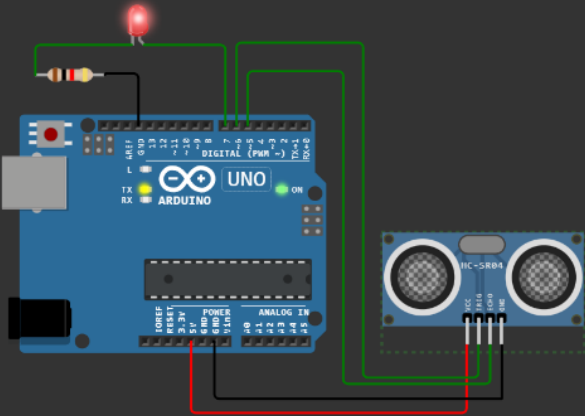


Simulation

00:27.266 97%

Editing Ultrasonic Distance Sensor

Distance: 99cm



97.73

97.73

97.84

97.84

97.82

97.73

97.73

97.73
97.73
97.84
97.84
97.82
97.73
97.73