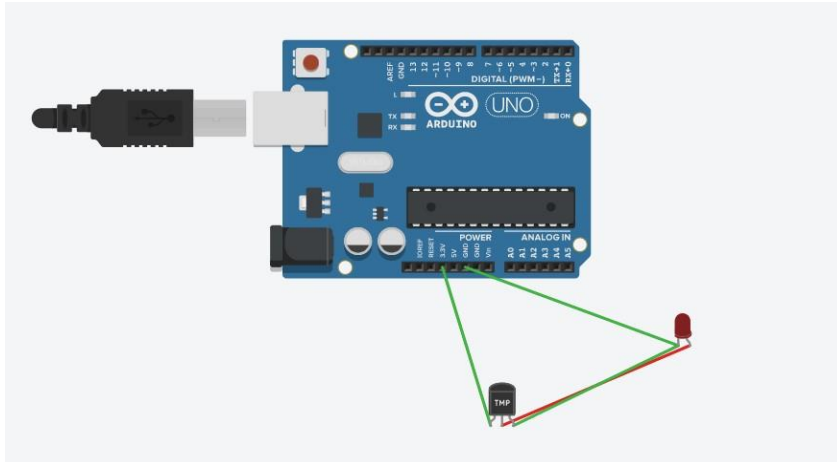


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CODE FOR TEMPERATURE SENSOR

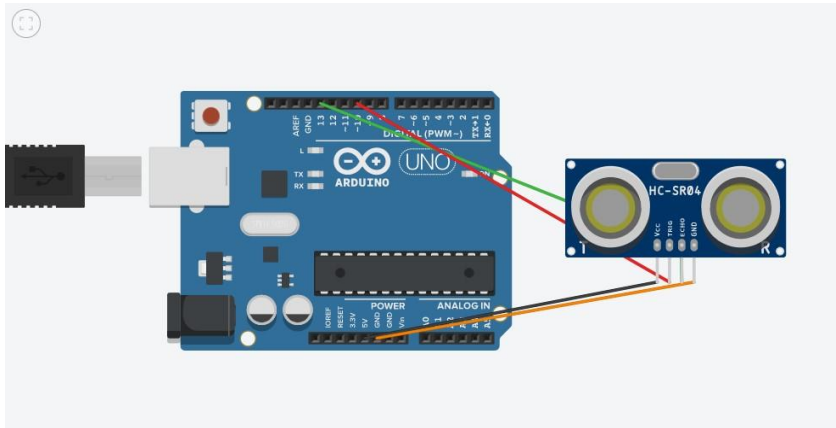


```
int celsius = 0; int  
fahrenheit = 0;
```

```
void setup()  
{  
  pinMode(A0, INPUT);  
  Serial.begin(9600);  
}
```

```
void loop()  
{  
  celsius = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);  
  fahrenheit = ((celsius * 9) / 5 + 32);  
  Serial.print(celsius);  
  Serial.print(" C, ");  
  Serial.print(fahrenheit);  
  
  Serial.println(" F");  
  delay(1500);  
}
```

CODE FOR ULTRASONIC SENSOR



```
// C++ code
//
#define trigPin 10
#define echoPin 13
float duration, distance;

void setup() {
  Serial.begin(9600);
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
}

void loop()
{
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW); duration
  = pulseIn(echoPin, HIGH);
  distance = (duration/2)* 0.0343;

  Serial.print("Distance = ");
  if(distance >= 400 || distance <= 2){
    Serial.println("Out of range");
  }
  else{
```

```
Serial.print(distance);  
Serial.println( "cm");  
delay(500);  
}  
delay(500);  
}
```