Arduino Sensors

Name – ESHAN KALP TRIVEDI

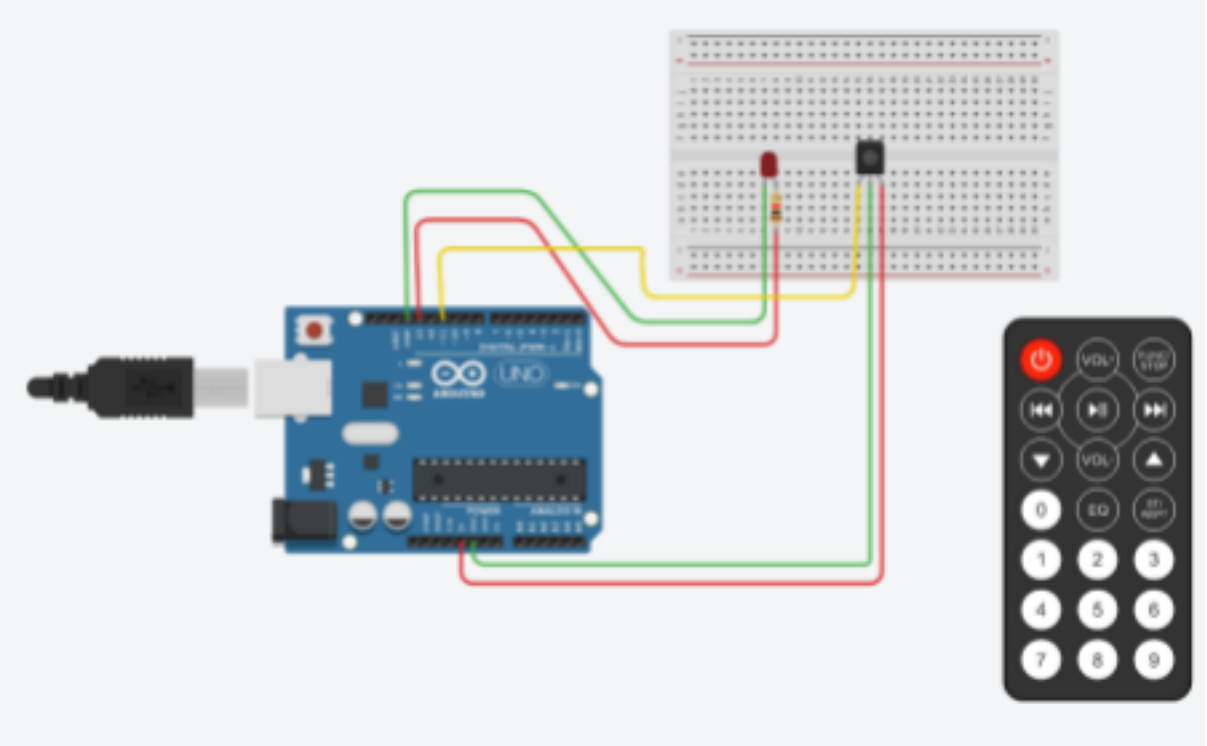
Roll no – 16010221038

Div – D

Batch – D2

IR Sensor:

Set up -



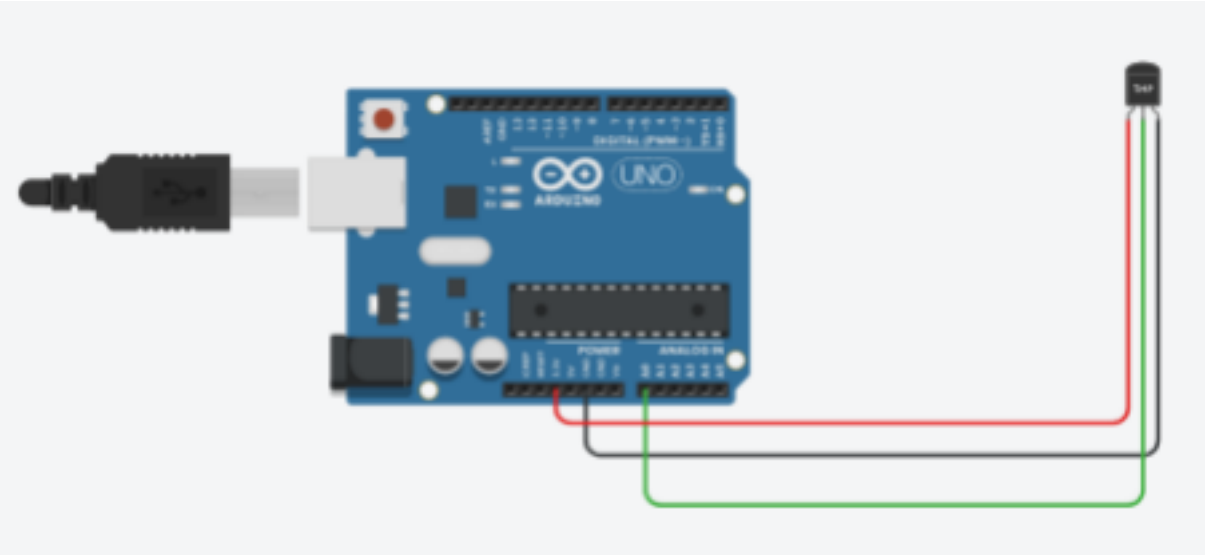
Code:

```
#include <IRremote.h>

int RECV_PIN=11;

IRrecv irrecv(RECV_PIN);

decode_results results;

void setup()

 {
pinMode(13, OUTPUT);
```

```
Serial.begin(9600);
Serial.println("Enabling
IRin"); irrecv.enableIRIn();
Serial.println("Enabled
IRin"); }
void loop()
{
if (irrecv.decode(&results))
{
Serial.println(results.value
, HEX); irrecv.resume();
if(results.value==0xFD08F7)
{
digitalWrite(13, HIGH);
}
else if (results.value==0xFD8877)
{
digitalWrite(13, LOW);
}
}
delay(20);
}
```

- **Temperature**

sensor: Set up -



Code:

```
int sensorPin=0;
void setup()
 {
 Serial.begin(9600);
 }
void loop()
 {
 int reading=analogRead(sensorPin);
 float voltage=reading*0.5;
 voltage/=1024.0;

 float temperatureC=(voltage-0.5)*100;
 Serial.print(temperatureC);
 Serial.println("Degree C");
 delay(1000);//wait for 1000 milisecond(s)
 }
```

Output:

Serial Monitor

```
-42.53Degree C
-42.53Degree C
-42.53Degree C
```