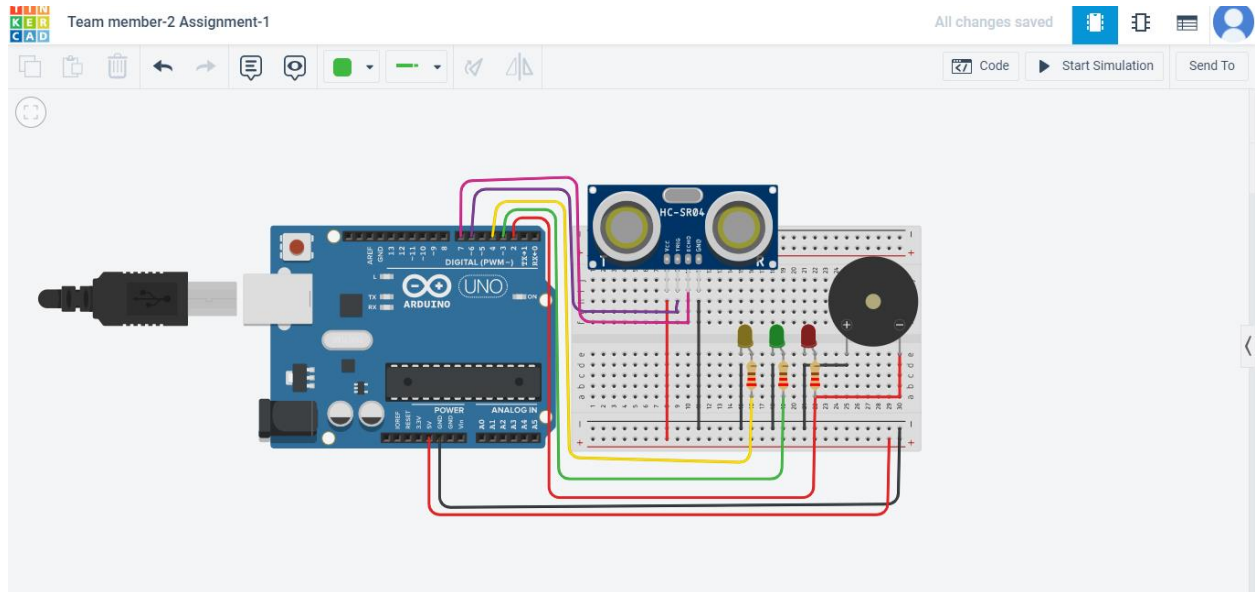


ASSIGNMENT-1(NALAIYA THIRAN)

TEAM MEMBER-2:R.RANJITH

REGISTER NUMBER:811519106113

SCHEMATIC(CIRCUIT DIAGRAM)



CODE:-(PROGRAM)

```
int distance = 0;
```

```
int cm = 0;
```

```
long readUltrasonicDistance(int triggerPin, int echoPin)
```

```
{
```

```
    pinMode(triggerPin, OUTPUT); // Clear the trigger
```

```
    digitalWrite(triggerPin, LOW);
```

```
    delayMicroseconds(2);
```

```
digitalWrite(triggerPin, HIGH);  
delayMicroseconds(10);  
digitalWrite(triggerPin, LOW);  
pinMode(echoPin, INPUT);  
return pulseIn(echoPin, HIGH);  
}  
  
void setup()  
{  
  Serial.begin(9600);  
  pinMode(2, OUTPUT);  
  pinMode(3, OUTPUT);  
  pinMode(4, OUTPUT);  
}  
  
void loop()  
{  
  distance = 330;  
  cm = 0.01723 * readUltrasonicDistance(6, 7);  
  Serial.print(cm);  
  Serial.println("cm");  
  if (cm > distance) {  
    digitalWrite(2, LOW);  
    digitalWrite(3, LOW);  
  }
```

```
digitalWrite(4, LOW);  
} else {  
  if (cm > 230) {  
    digitalWrite(2, LOW);  
    digitalWrite(3, LOW);  
    digitalWrite(4, HIGH);  
  } else {  
    if (cm > 100) {  
      digitalWrite(2, LOW);  
      digitalWrite(3, HIGH);  
      digitalWrite(4, LOW);  
    } else {  
      if (cm > 1) {  
        digitalWrite(2, HIGH);  
        digitalWrite(3, LOW);  
        digitalWrite(4, LOW);  
      } else {  
        digitalWrite(2, LOW);  
        digitalWrite(3, LOW);  
        digitalWrite(4, LOW);  
      }  
    }  
  }  
}
```

```
}
```

```
}
```

```
delay(100); }
```