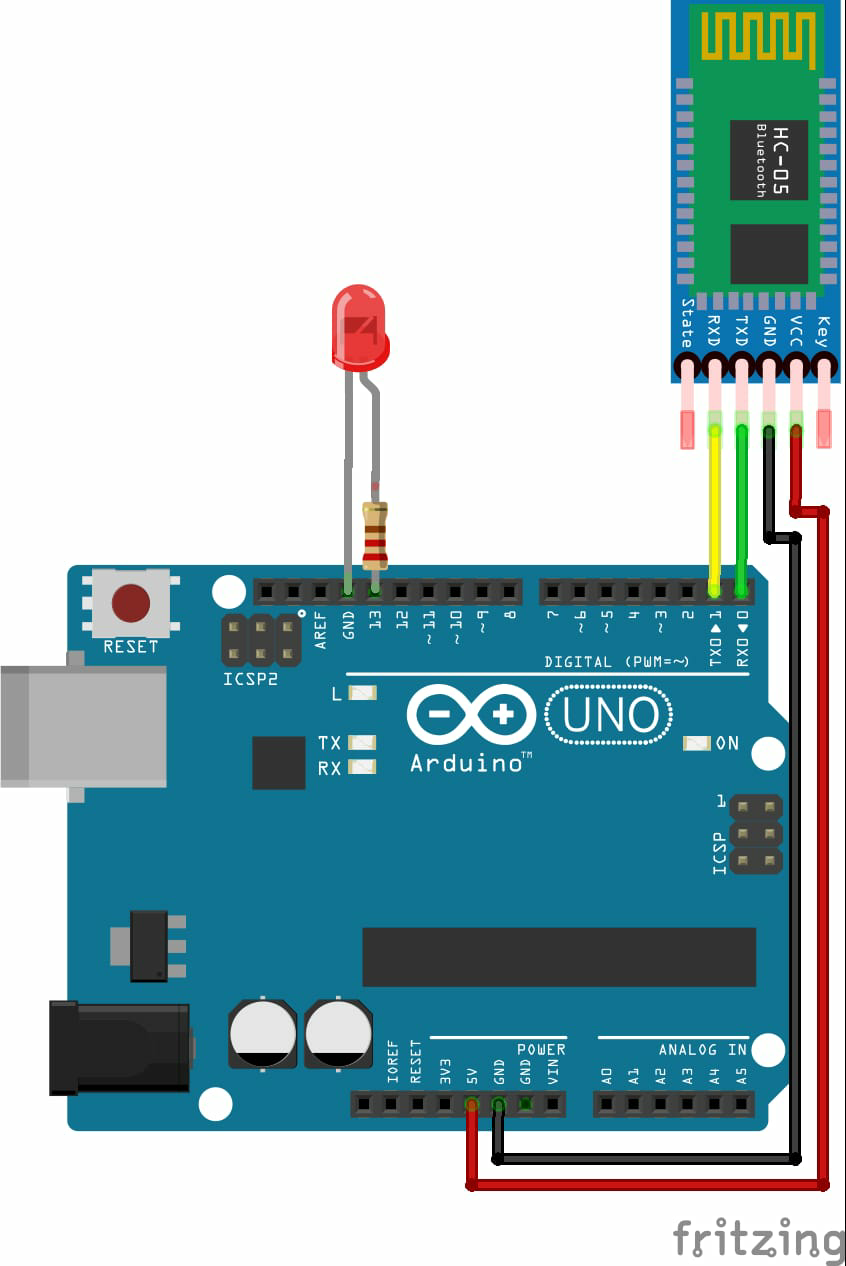
Experiment

**Design a smartphone controlled device**

**Circuit diagram:**



**Theory:**

# CONCEPT USED:

* **By using kirchoff’s voltage law**

**&**

* **By using kirchoff’s current law**
* **Wireless technology**
* **Radiation & wave frequency**

# LEARNING AND OBSERVATIONS:

* **Connections in Breadboard and wiring.**
* **How to control arduino and its coding.**
* **Use of multimeter for continuity.**
* **Proper use of bluetooth**

**OBSERVATION:**

* **Controlling of devices through a remote**
* **Relation between software and hardware.**
* **Varation of frequency**

# PROBLEMS & TROUBLESHOOTING:

* **To select the right port and type of arduino**
* **To check the loose connections**
* **To check the connections according to the codes**
* **To check the continuity of the circuit**
* **To check the flow of current in the circuit**
* **Errors in code**
* **Setting up right connections**
* **Display in proper order**
* **Pinmodes of devices**

# PRECAUTIONS:

* **Handle tools carefully**
* **Wear gloves**
* **Do not connect arduino till the circuit is complete**
* **Do not connect leds without a variable resistor**
* **Proper Bluetooth module**

# OUTCOMES:

* **Making of wireless controlled devices**
* **By bluetooth module**
* **Proper use of Arduino and breadboard**