



EXPERIMENT-6

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Branch: CSE BTECH

Section/Group: 26 (B)

Semester: 2ND

D.O.P

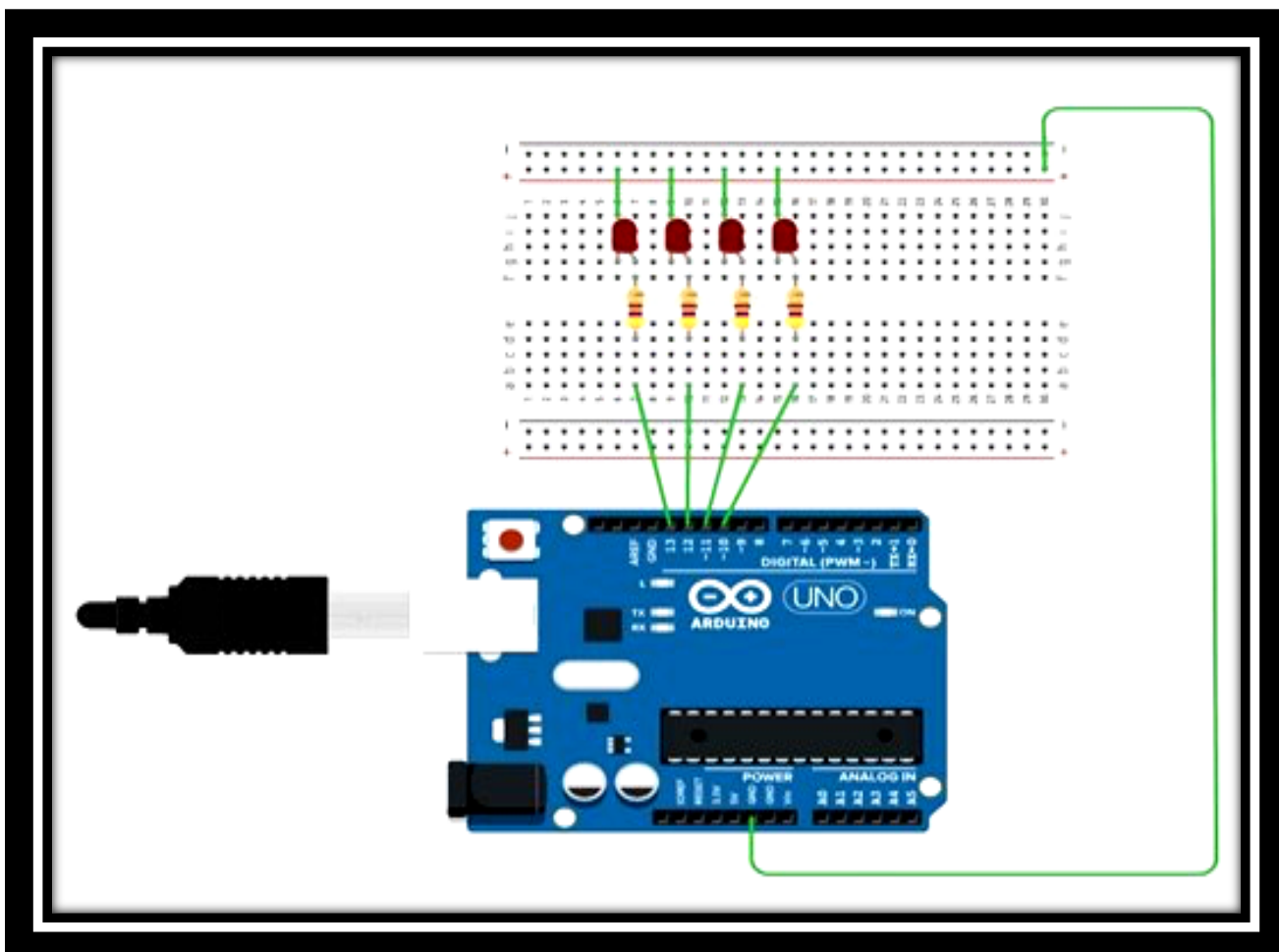
Subject Name: BEEE Lab

1. **Aim:** Design Christmas Dual LED chaser lights.

❖ 2. Apparatus:

S.No	Name of the equipment
1	Ardunio
2	LED
3	Resistance 470 ohm

❖ Circuit Diagram:



4. Steps for experiment:

❖ First connect the Arduino with the computer and upload the program to it.

```
Void setup()
```

```
{  
  for(inti=10, i<=13, i++) {pinMode(i, OUTPUT)
```

```
}
```

```
}
```

```
void loop()
```

```
{
```

```
  for(inti=10; i<14, i++){all LEDsOff();
```

```
  if (i!=13){ digitalWrite(i,HIGH); digitalWrite(i+1,HIGH);
```

```
  delay(200);
```

```
  }
```

```
  elsedigitalWrite(i,HIGH); digitalWrite(i-3,HIGH); delay(200); allLEDsOff();
```

```
  }
```

```
}
```

```
voidallLEDsOff(void)
```

```
{
```

```
for (inti = 10; i<= 14; i++)
```

```
{
```

```
digitalWrite(i, LOW);
```

```
}
```

```
delay(100);
```

```
}
```



❖ Make connections with Arduino as shown in the above circuit.

5. Sources of Error:

- Due to interruption of power supply.
- Due to internal resistance of connecting wires.

6. Observations/Discussions:

NO

7. Percentage error (if any or applicable):

NO

8. Result: Chasing of LED was verified after uploading the program.

9. Graphs (If Any): Image /Soft copy of graph paper to be attached here

NO

❖ **Learning outcomes (What I have learnt):**

1. Understood the concept of Arduino.
2. To design the circuit using Arduino.
3. To verify the circuit by programming.

❖ **Evaluation Grid:**

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.	Worksheet completion including writing learning objectives/Outcomes.(To be submitted at the end of the day).		10
2.	Post Lab Quiz Result.		5
3.	Student Engagement in Simulation/Demonstration/Performance and Controls/Pre-Lab Questions.		5
	Signature of Faculty (with Date):	Total Marks Obtained:	



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