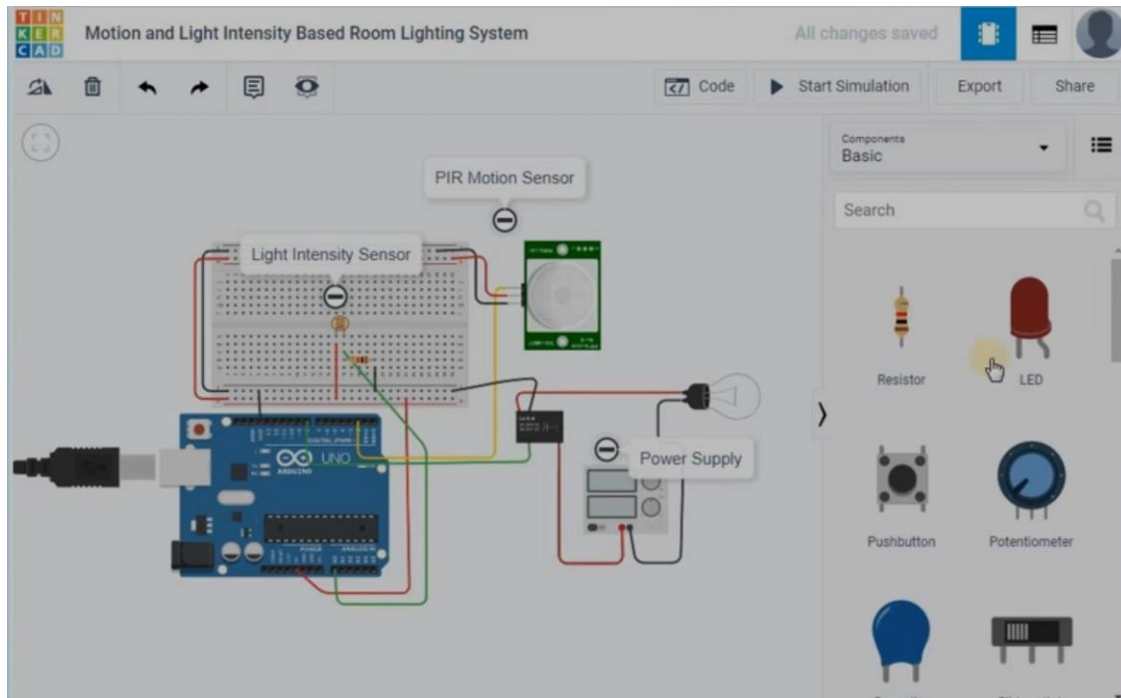


ASSESSMENT-1

Motion and light intensity based room lighting system



PROGRAM

```
int LightSensorVal = 0;
int PIRSensorVal = 0;
int RelayOutputVal = 0;
void setup()
{
  pinMode(A0, INPUT);  pinMode(2, INPUT);  pinMode(8, OUTPUT);
  Serial.begin(9600);
}
```

```
void loop()
{
  LightSensorVal = analogRead(A0);
  PIRSensorVal = digitalRead(2);
  RelayOutputVal = 8;
  if (LightSensorVal < 600) {
    if (PIRSensorVal == HIGH) {
      digitalWrite(8, HIGH);
      delay(5000); // Wait for 5000 millisecond(s)
    } else {
      digitalWrite(8, LOW);
      delay(1000); // Wait for 1000 millisecond(s)
    }
  } else {
    digitalWrite(8, LOW);
    Serial.println(LightSensorVal);
    delay(300); // Wait for 300 millisecond(s)
  }
}
```