NAME :- M.Govind

ROLLNO-122010333045

EXPERIMENT-1

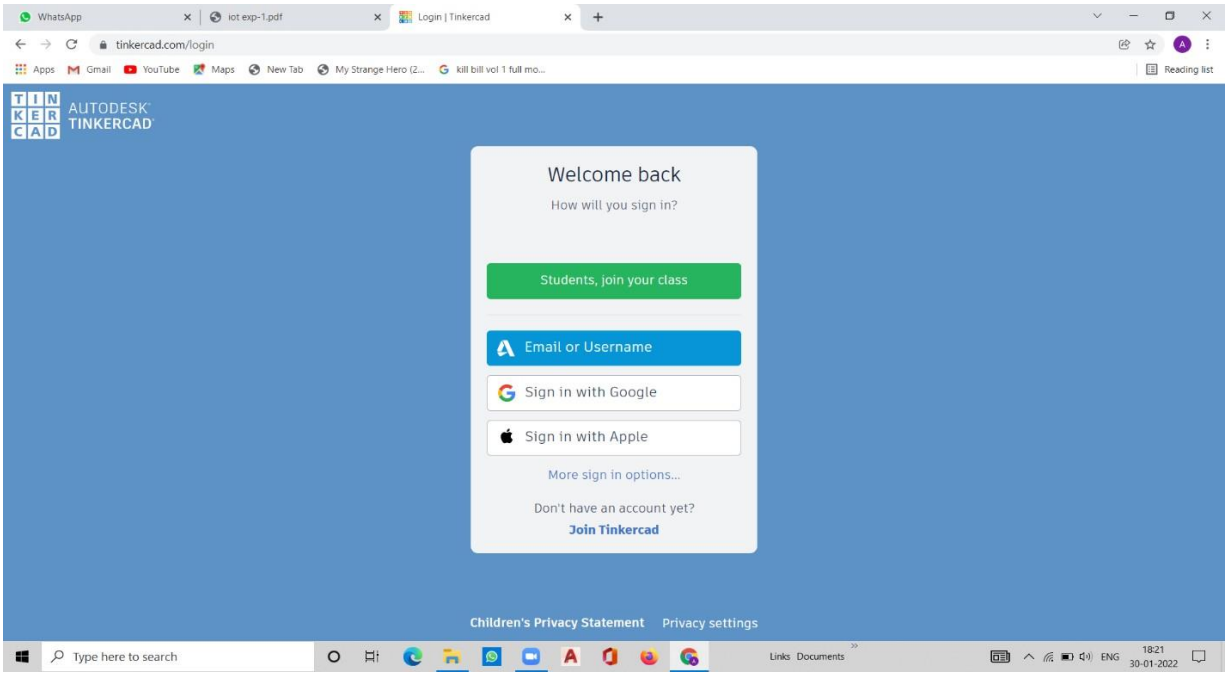
AIM:- Control the LED with Arduino Board and tinkercad software.

OBJECTIVE:- To get knowledge of Arduino board and control of output device(LED). **OUTCOMES:-** Students will write program using Arduino IDE for Blinking LED. **HARDWARE REQUIREMENT:**

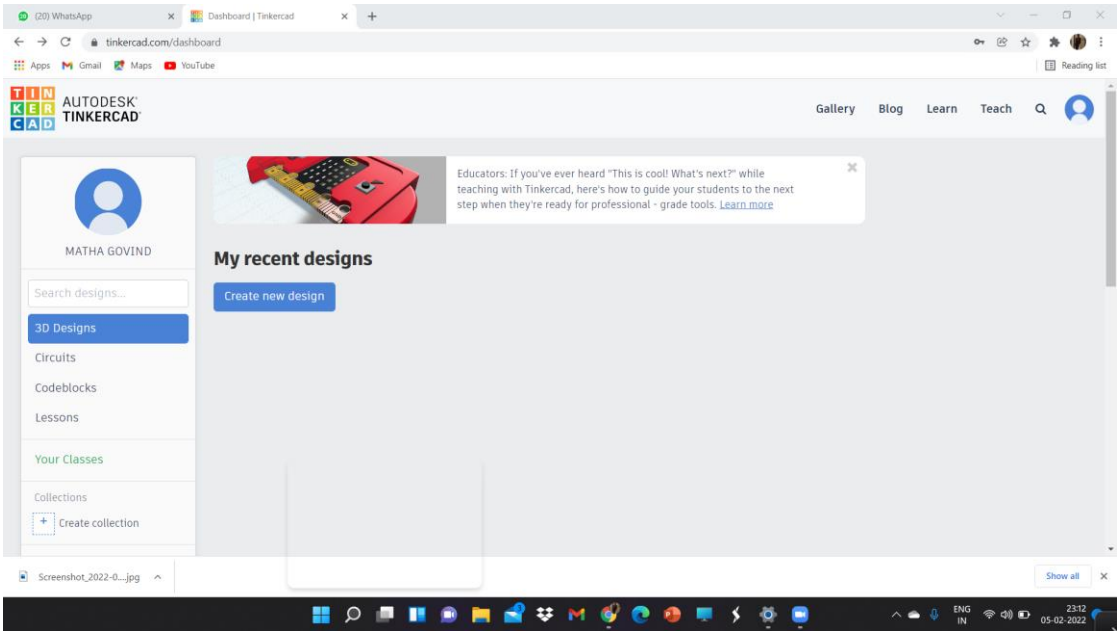
1) One Breadboard
2) One Arduino Uno
3) One LED
4) One 330Ω Resistor
5) Two Jumper Wires

PROCEDURE:-

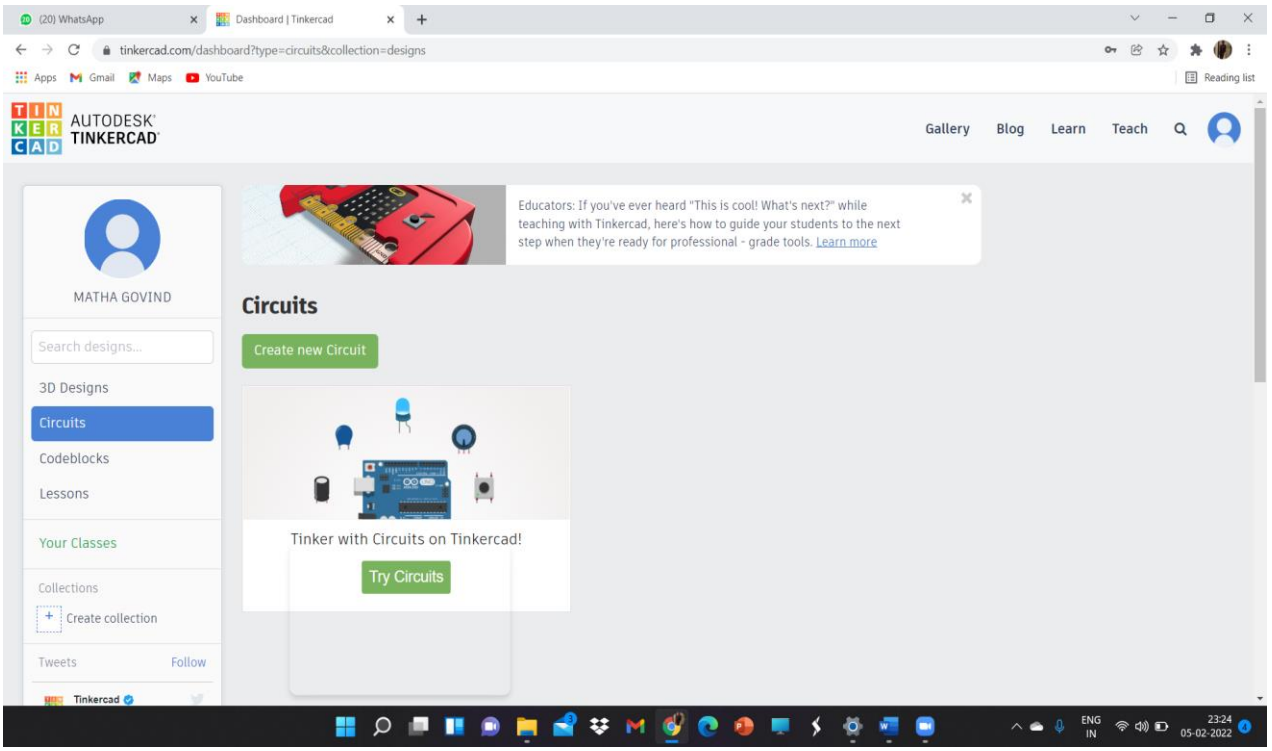
1. Login with an existing gmail account or create a new account.



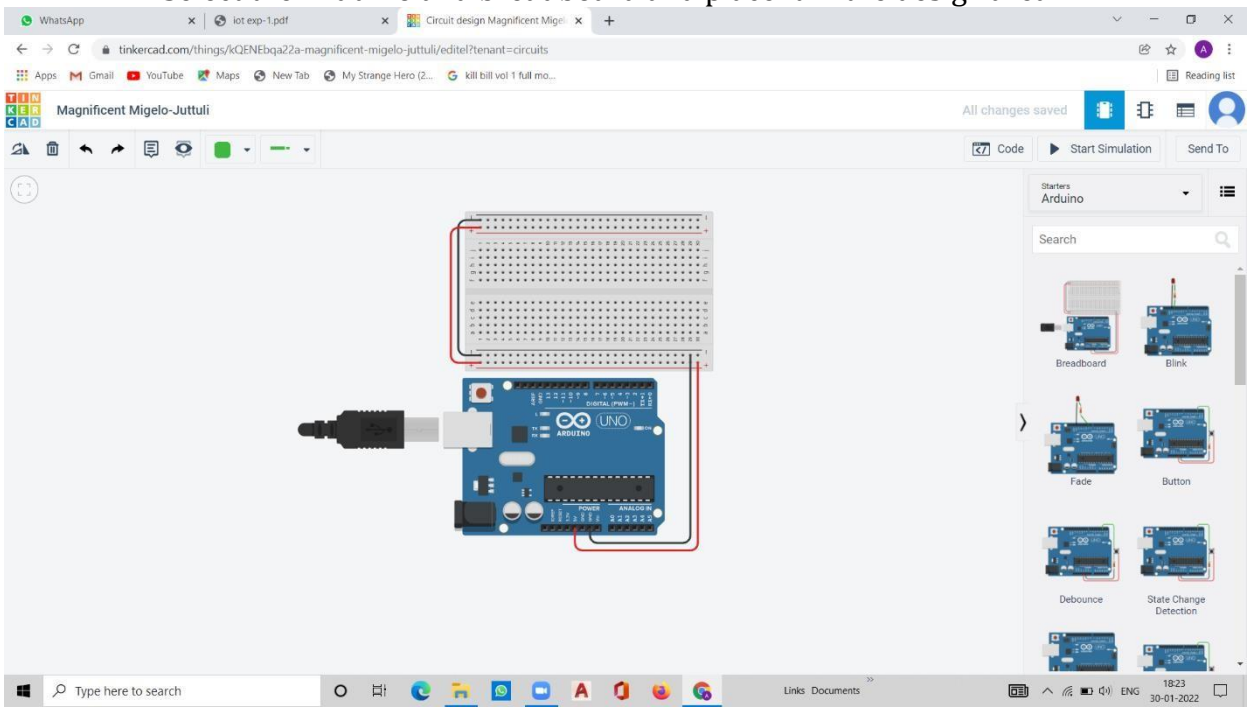
2. Click on create project and create a new project



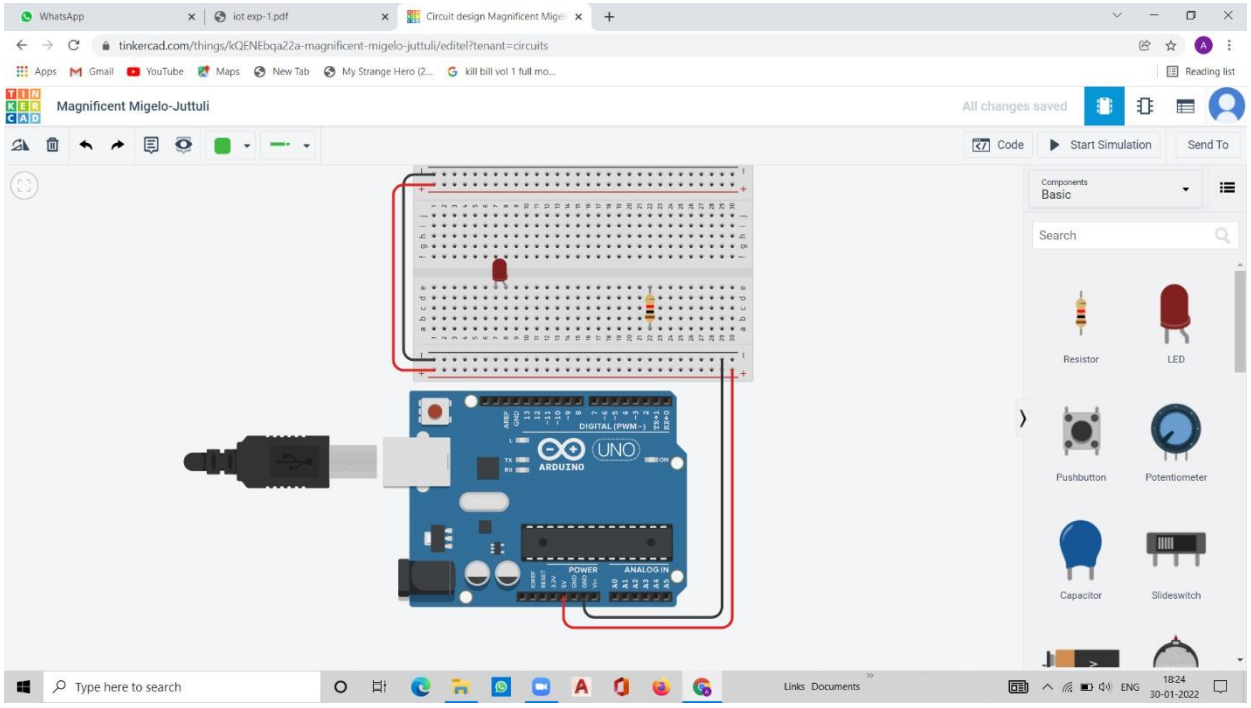
3. Go to Create menu and select circuit.



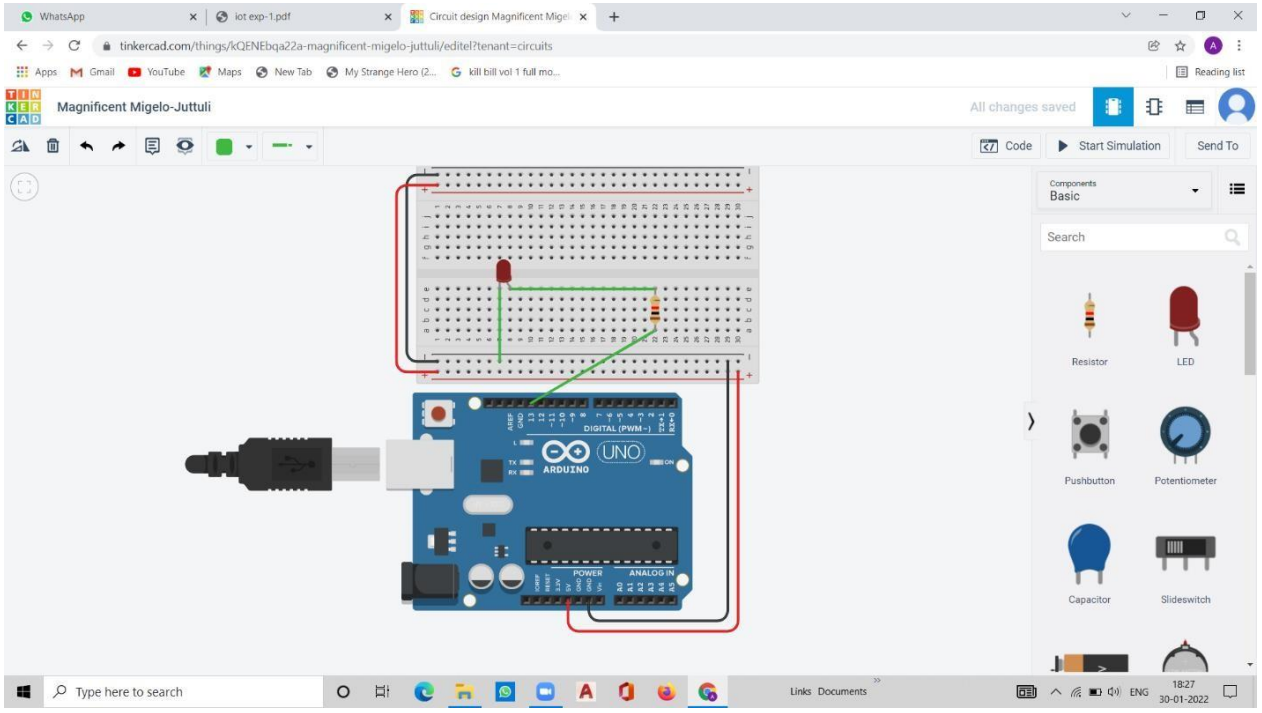
4. Select the Arduino and breadboard and place it in the design area.



5. Place Led and Resistor



6. Search the component LED and resistor, make connections as shown and resistor value as 330ohms.

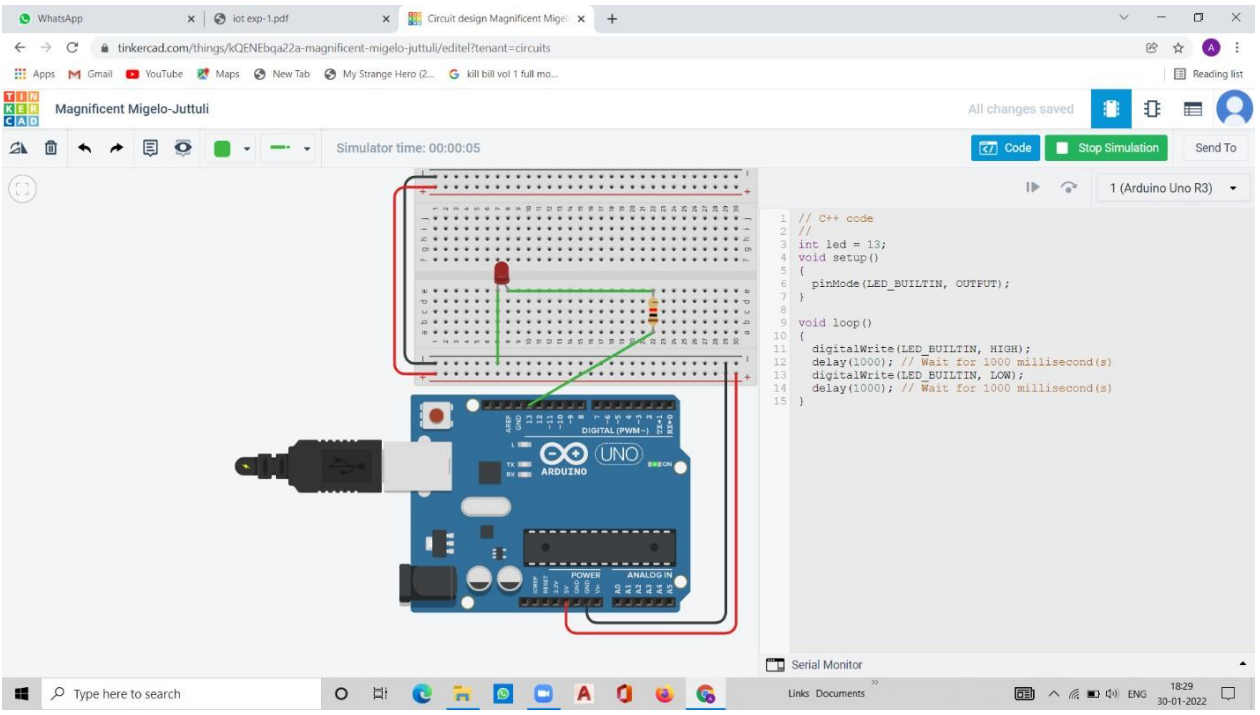


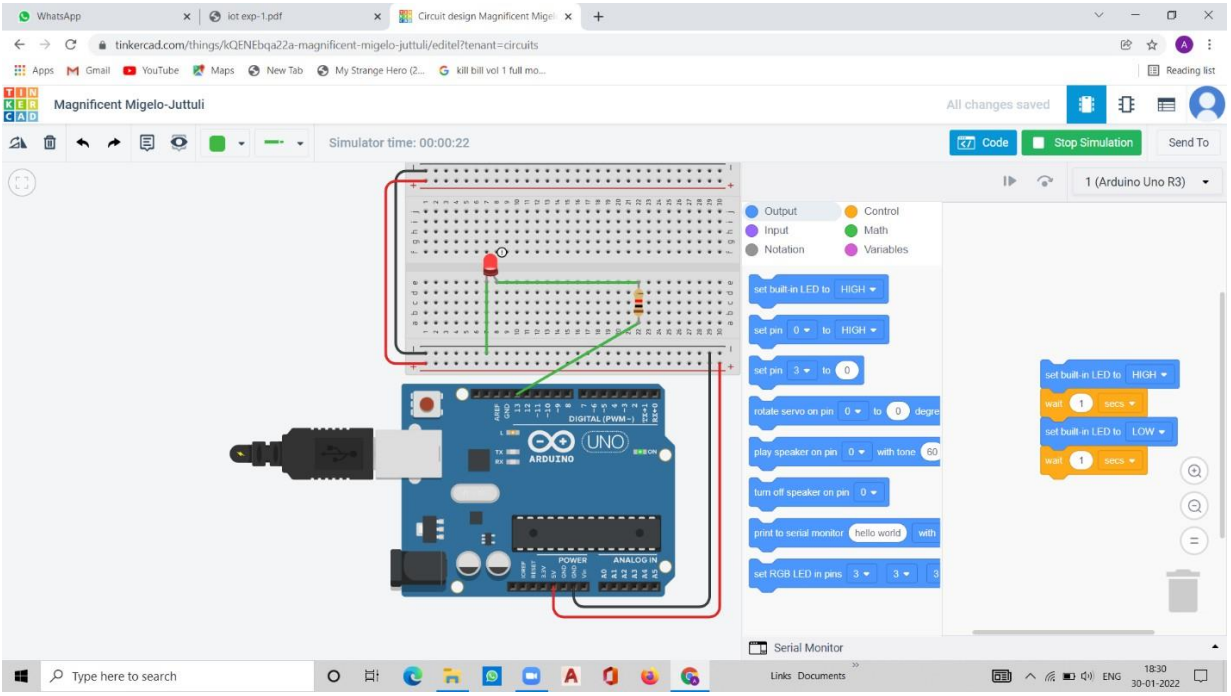
7. Once circuit connections are ready , programming the Arduino can be done in 3 ways

1) Using code blocks

2) Using text program

3) Using code blocks + text programming


Magnificent Migelo-Juttuli
All changes saved
Simulator time: 00:00:05
Code
Stop Simulation
Send To
1 (Arduino Uno R3)
// C++ code
//
int led = 13;
void setup()
{
pinMode(LED_BUILTIN, OUTPUT);
}
void loop()
{
digitalWrite(LED_BUILTIN, HIGH);
delay(1000); // Wait for 1000 millisecond(s)
digitalWrite(LED_BUILTIN, LOW);
delay(1000); // Wait for 1000 millisecond(s)
}
Serial Monitor
Type here to search
Links Documents
ENG
18:29
30-01-2022


Magnificent Migelo-Juttuli
All changes saved
Simulator time: 00:00:22
Code
Stop Simulation
Send To
1 (Arduino Uno R3)
Output
Control
Input
Math
Notation
Variables
set built-in LED to HIGH
set pin 0 to HIGH
set pin 3 to 0
rotate servo on pin 0 to 0 degre
play speaker on pin 0 with tone 60
turn off speaker on pin 0
print to serial monitor hello world with
set RGB LED in pins 3 3
set built-in LED to HIGH
wait 1 secs
set built-in LED to LOW
wait 1 secs
Serial Monitor
Type here to search
Links Documents
ENG
18:30
30-01-2022