**Practical 1:**

Program to blink Arduino onboard LED and to interface external LED with Arduino and write a program to turn On LED for 1 sec after every 2 seconds.

<https://www.tinkercad.com/things/0qFByxeVETK-stunning-hillar-kup/editel?sharecode=EP_j1WtLABIiMjxy_glhUsqa_gFYcqWDOBy58Jau_kc>

**Practical 1b:**

Q1)Program to blink Arduino uno board two led and two resistor to interface external LED with Arduino and write a program to turn on Led for 1 sec after every 2 seconds.

<https://www.tinkercad.com/things/cmwzizZhm5q-tremendous-blorr/editel?sharecode=zf3zyqmEPNvPApNGy8GauYGBYbRDGY-ceCe4LHU2rt8>

**Practical 1c:**

Q1)Program to blink Arduino uno board two led and one resistor to interface external LED with Arduino and write a program to turn on Led for 1 sec after every 2 seconds.

<https://www.tinkercad.com/things/hENiXU6uW0l-copy-of-practical-1bb/editel?sharecode=8_66UvgVb5dPqJP9RASHEMF7tAUZjN1ECyo3qN-200A>

**Practical 2:**

To interface 5 LED’s with arduino and write a program to blink 5 leds, one at a time, in a back and forth formation.

<https://www.tinkercad.com/things/1IiwbDATylL-practical-2/editel?sharecode=fA3gIR0wkwnl817RTA9DEmZz3cn-7tYIYHsIxvFD2JA>

**Practical 3:**

To Interface Push button with Arduino and write a program to turn on when push button is pressed.

<https://www.tinkercad.com/things/76n9YIaUAf5-stunning-fyyran-blad/editel?sharecode=M5UIB7PHPzSPPdnod_8hvHsw0lh_CWF4k5gOOAYn0r8>

**Practical 4:**

To interface Push button Speaker buzzer with arduino and write a program to turn ON LED and generate a note or tone when push button is pressed.

<https://www.tinkercad.com/things/1bmQ0NpGk0p-incredible-snaget/editel?sharecode=-83WiU0SpSH8GsNTgF7bqgd2Ob9VnwqP92ZpQ9b8cU4>

**Practical5:**

To interface seven Segment Display with arduino and write a program to blink SSD

<https://www.tinkercad.com/things/7X77VaicHOX-copy-of-practical-6/editel?sharecode=xq23CvzTBmJPftoHp_kWiOaJjKkzrxMs2TAgQRZ6rUU>

**Practical 6:**

TO Interface Seven segment display(SSD) with arduino and write a program to blink SSD for 1 to 9 Number..

<https://www.tinkercad.com/things/9MUbyk0gmV8-lcd-with-arduino/editel?sharecode=zKxO-d54J79Ti-fd7pzgjMPGgxJdg0dBpyu-ZV8KWRc>

**Practical 7:**

To interface LCD with Arduino and write a program to display messages on LCD.

<https://www.tinkercad.com/things/9MUbyk0gmV8-lcd-with-arduino/editel?sharecode=zKxO-d54J79Ti-fd7pzgjMPGgxJdg0dBpyu-ZV8KWRc>

**Practical 8:**

To interface LCD, potentiometer with Arduino and write a program to display messages on LCD.

<https://www.tinkercad.com/things/i3zVOTh6H7T-potentiometer-lcd-with-arduino/editel?sharecode=2URvGvUjLkIcwWUBVTggId29cNi1P2wRleFFzysqj1c>

**Practical 9:**

To interface LCD, push button, potentiometer with Arduino and write a program to display a message on LCD when push button is pressed.

<https://www.tinkercad.com/things/86RgOoT812a-copy-of-potentiometer-lcd-with-arduino/editel?sharecode=bdSSLnwOHfZVA1Pnzl0STE5JC8AkvAh8BUO_O8-8Mac>

**Practical 10:**

To interface LCD, push button, potentiometer with Arduino and write a program to display the no. of times (count) the push button is pressed on the LCD.

<https://www.tinkercad.com/things/5K9ardGedel-no-of-times-counts/editel?sharecode=MSzi_4mwC5bDAl4yfnEfOhgi_vwO4i92Pgz2HJC0pyM>

**Practical 11:**

To interface LED, Photoresistor (LDR) with Arduino and write a program to increase and decrease the brightness of the LED based on the amount of light

<https://www.tinkercad.com/things/cgRCDJ9qhzT-brightness-of-led/editel?sharecode=140tGB8KKMTceZNr8D-N25mrKIXBOcqNp3NmzyzRjdU>

**Practical 12:**

To interface *DHT11* sensor with Arduino and write a program to display temperature and humidity data on serial monitor.

<https://www.tinkercad.com/things/52T26t3G681-swanky-curcan-wluff/editel?sharecode=GsIV9ztB8EFwxI8FnZepkFgIqDYPqeWeMOR1PnpCVhE>

**Practical 13:**

To interface PIR/ Ultrasonic sensor with Arduino and write a program to turn on and off LED depending on motion detection/sound detection.

<https://www.tinkercad.com/things/0lHtuy5VRNu-practical-13/editel?sharecode=EGJHUIirGw2MPugtYcL7s-TWE7FXm8ntMaMrUs5PYvE>

**Practical 14:**

To interface servo motor/DC motor with Arduino and write a program to sweep a servo back and forth through its full range of motion/ to control a DC motor.

<https://www.tinkercad.com/things/7J7nfSHnarY-practical-14/editel?sharecode=RrmcuSpORkddaXzKaGcFjL3Gpa9aXlDVDxFE1Xjj5yQ>

**Practical 15:**

To interface a DC motor with Arduino and write a program to control Speed of a DC motor.

<https://www.tinkercad.com/things/7g5VTDA4cau-practical-15/editel?sharecode=xVKwjx2nfyivNCEAb8ApxZuomM8K2YUybgnH6NJbl9c>

**Practical 16:**

Thing speak