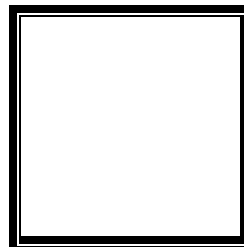




PAMANTASAN NG LUNGSOD NG MAYNILA
(University of the City of Manila)
Intramuros, Manila

Microprocessor Lab

Laboratory Activity No. 1
Familiarization with TinkerCAD



Score

Submitted by:

Baldanzo, Raizza Marrie C.

S 7:00am-10:00am, 10:00am-1:00pm / Microprocessors lec and lab, CPE 0412-1/ CPE 0412.1-1

Date Submitted

16-09-2023

Submitted to:

Engr. Maria Rizette H. Sayo

1. Exercise

- A process in Tinkercad where we can develop electronic circuits that can be quickly updated, modified and tested is called **simulation**.
- In Tinkercad, **simulation** tests the working of the circuits and the components.
- The device used to assemble and connect the various components is known as **breadboard**.
- In an electronic circuit with LED, the positive end of the circuit should be connected to **anode** and negative end should be connected to **cathode** of the LED.
- A **resistor** is used to restrict the flow of current to electrical components

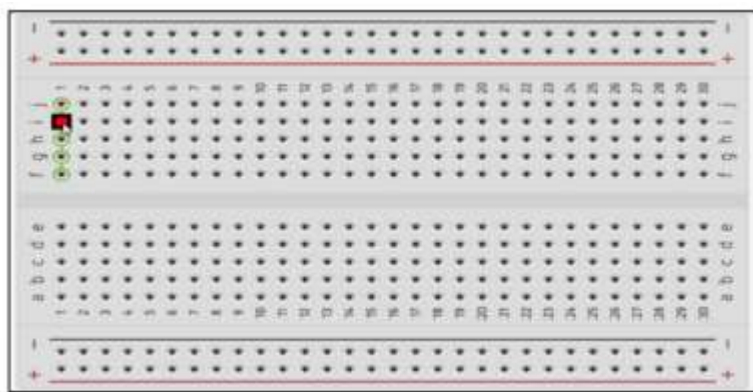
2. Label the following:

- Anode and Cathode in a LED



Cathode: the shorter lead
Anode: the longer lead

- Different parts of breadboard



- Rows: a to j
- Columns: + and -
- Holes: where you connect and insert components
- Red lines: creates electrical connection between the components
- Black lines: electrical connections separate from red lines

- List the electronic components used in a circuit assembly

- Resistor- has terminal 1 and terminal 2, wherein there's no difference because it does not affect fundamental operation
- LED- has anode and cathode, and it emits light
- Potentiometer- has a knob to adjust resistance
- Breadboard small- creates circuit for testing without soldering
- Arduino Uno R3- the brain of the board
- Transistors
- Capacitors
- Switches
- Connectors
- Wires
- Diodes
- Inductors