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:
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Saturday 10:00AM – 1:00PM / CPE 0412.1-1

Date Submitted
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Submitted to:

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1. Exercise

a. A process in Tinkercad where we can develop electronic circuits that can be quickly updated, modified and tested is called **prototyping process**.

b. In Tinkercad, **Start/Stop simulation** tests the working of the circuits and the components.

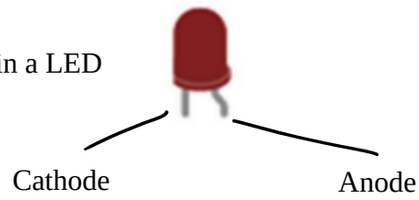
c. The device used to assemble and connect the various components is known as **breadboard**.

d. In an electronic circuit with LED, the positive end of the circuit should be connected to the **anode** and negative end should be connected to the **cathode** of the LED.

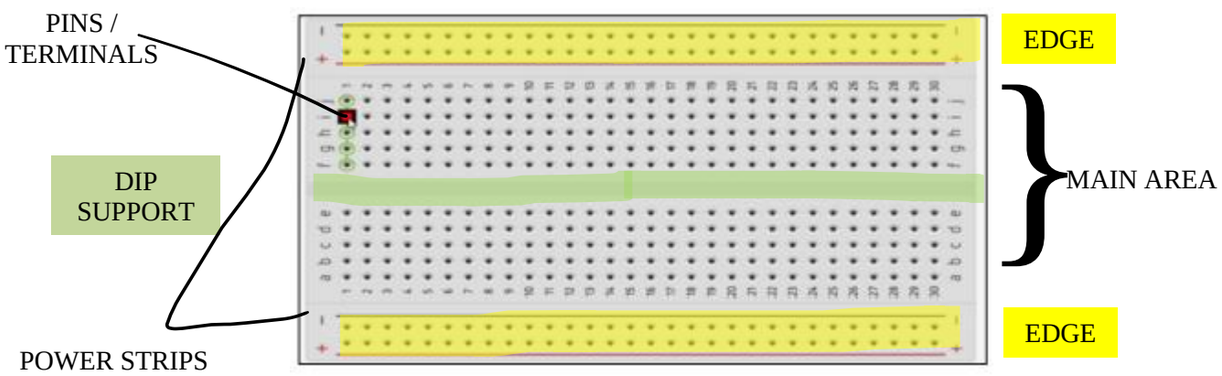
e. A **resistor** is used to restrict the flow of current to electrical components.

2. Label the following:

a. Anode and Cathode in a LED



b. Different parts of breadboard



c. List the electronic components used in a circuit assembly.

- Wires/Cables – used to connect components on the breadboard.
- LED – light emitting diodes which are often used as an indicator whether a circuit simulation is properly working.
- Resistors – component that restricts the flow of power/current to avoid overheating or damage of other components.
- Potentiometer – same function as a resistor but adjustable and provides range.
- Power Supply – necessary to power up the circuit.
- Switches/Buttons – used to enable control over functionalities of the circuit