

Introduction to Conditional Statements

Conditional statements help the program make decisions. They check whether a condition is True or False and act accordingly.

In Python, the most common conditional keywords are:

- if – checks if a condition is true.
- else – runs when the condition is false.
- elif – used when there are multiple conditions.

Example:

```
if temperature > 30:  
    print("It's Hot!")  
elif temperature > 20:  
    print("It's Warm.")  
else:  
    print("It's Cold!")
```

Here, the program checks one by one until it finds a true condition.

Coding part

Here is the code you can see if you face any doubt while doing this task



The screenshot shows the Mu Python IDE interface. The top toolbar includes icons for Mode, New, Load, Save, Serial, Plotter, Zoom-in, Zoom-out, Theme, Check, Tidy, Help, and a search icon. The code editor displays the following Python code:

```
1 from adafruit_circuitplayground import cp  
2 import time  
3  
4 light_value = cp.light  
5 print("Light value:", light_value)  
6  
7 if light_value < 50:  
8     cp.pixels.fill((255, 255, 0)) # Yellow light ON if low light  
9 else:  
10    cp.pixels.fill((0, 0, 0))      # Lights OFF if bright  
11
```

Save and Run

- Save as **code.py** on the CPX drive.
- Open the **Serial Monitor** in Mu to see the light value printed.
- Try covering the CPX — light will turn **ON** when the sensor detects less light.
- If light value is high, LEDs will remain **OFF**.
- Change the number in the `if` condition (like 40, 60, 80) and test how sensitivity changes.