

Controlling a Servo using Crickit

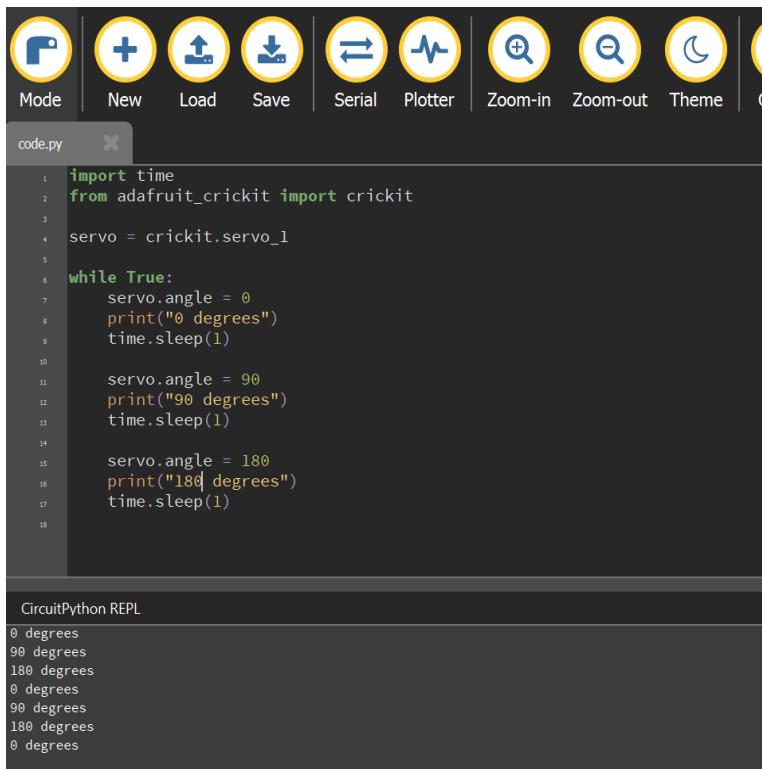
Step 1: Components Required

- Crickit board
- CPX board
- Servo motor (SG90)
- Jumper wire / direct plug into Servo port
- Power adapter for Crickit

Step 2: Connect the Servo

- Plug the servo into **Servo Port 1** on the Crickit.
- Make sure the wires are in correct direction (White = signal, Red = V+, Brown/Black = GND)
- CPX should already be mounted on Crickit and powered.

Step 3: Code



The screenshot shows the CircuitPython Code Editor interface. At the top, there is a toolbar with various icons: Mode, New, Load, Save, Serial, Plotter, Zoom-in, Zoom-out, Theme, and a Help icon. Below the toolbar, a code editor window displays the following Python script:

```
1 import time
2 from adafruit_crickit import crickit
3
4 servo = crickit.servo_1
5
6 while True:
7     servo.angle = 0
8     print("0 degrees")
9     time.sleep(1)
10
11     servo.angle = 90
12     print("90 degrees")
13     time.sleep(1)
14
15     servo.angle = 180
16     print("180 degrees")
17     time.sleep(1)
18
```

Below the code editor is a "CircuitPython REPL" window showing the output of the script:

```
0 degrees
90 degrees
180 degrees
0 degrees
90 degrees
180 degrees
0 degrees
```

Code Explanation

- `import time` → used for adding delays
- `from adafruit_crickit import crickit` → imports the CRICKIT control library
- `my_servo = crickit.servo_1` → selects the servo connected to the **Servo 1** port

- `while True`: → makes the code run in a continuous loop
- `my_servo.angle = 0` → moves the servo to **0 degrees**
- `my_servo.angle = 90` → moves the servo to **90 degrees**
- `my_servo.angle = 180` → moves the servo to 180 **degrees**

Step 4: Save & Run

- Save as `code.py`
- Upload to CIRCUITPY
- Observe servo moving back and forth