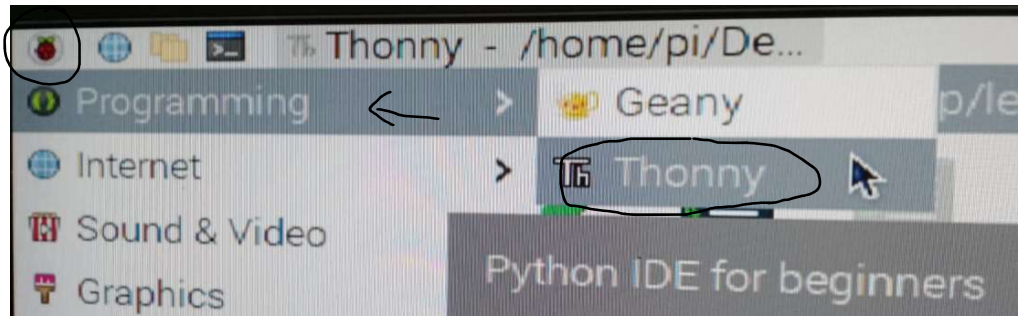
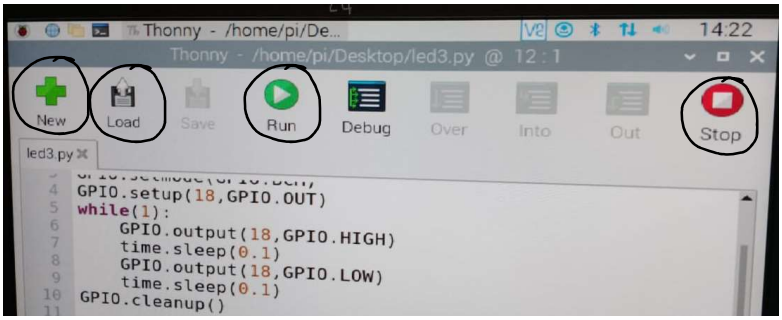
A) Raspberry PI LED instructions:

1. Login to Raspberry Pi module with all connections of Keyboard, Mouse, Monitor plug, Power Line, and Network cable .
2. For system Username: pi
   Password: raspberry
3. Top left most button-> Programming-> Thonny.



4. Click on " **+** " button to create a new python file-> Enter the code-> save it on desktop-> Click on " **Load** " and select that file from desktop-> click on " **Stop** "-> add LED connections on board with correct pins (+ve and-ve)-> click on " **Run** ".

Code:

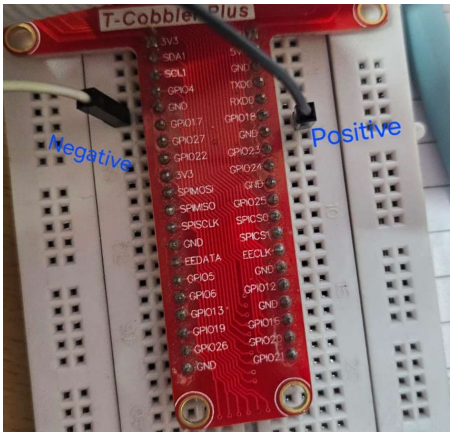



```
import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BCM)
GPIO.setup(18,GPIO.OUT)
while(1):
        GPIO.output(18, GPIO.HIGH)
        time.sleep(3)
        GPIO.output(18, GPIO.LOW)
        time.sleep(3)
GPIO.cleanup()
```

<u>Device Connection:</u>

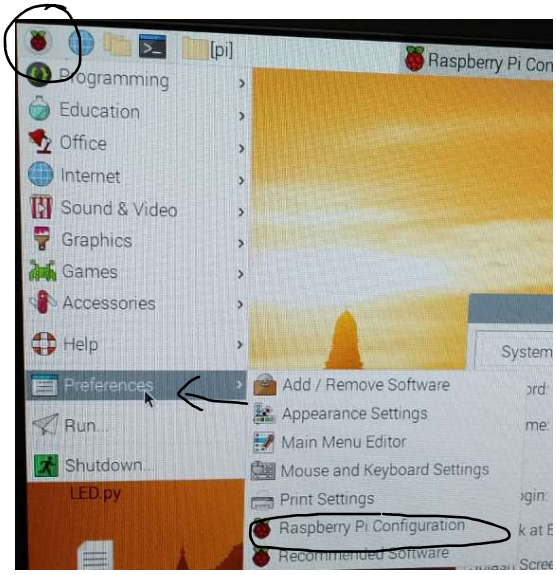
Positive : GPIO18

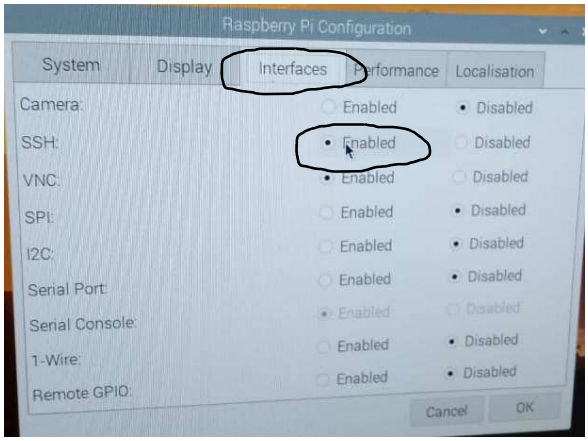
Negative: GND (ground)



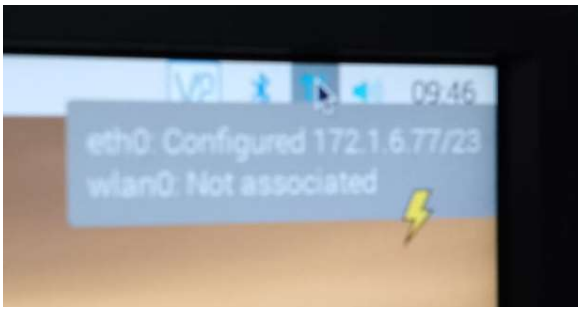
B) SSH Program

1. After doing all steps of part " **A** " , continue with this.
2. Top left most button-> Preferences-> Raspberry PI Configuration.
3. On the appeared window-> Interfaces-> check **if SSH is enabled** , if not then enable it-> **Ok**-> Close.





4. Move to next pc with windows as OS.
5. Search " **Putty** " and open the app-> enter the ip (ex: **172.1.6.77**) from the previous pc through top right corner with arrow icon (don't enter suffix of ip " / 23"-> click OK .



6. In the popped up terminal -> Enter login id : " **pi** " -> password : " **raspberry** "-> enter " cd Desktop "-> enter " **ls** "-> type " **python3 filename.py** " (to get the LED working on previous PC select the file saved with the python code for LED).