**Step by Step Configuration of BeagleBone Black Board and it’s set up in windows:**

1. **To boot up the BeagleBone Black board:**

* Plug the ethernet cord to the board and the other end plugged into the router or the network.
* Thus, accessing the board through the terminal window.
* Plug in the beaglebone black board via USB cable.

1. **To get the IP address of the ethernet connected:**

* Install the drivers from the site beagleboard.org for the respective operating system to give the network-over-USB access to Beagle.
* Enter the USB IP address which is common for all users which is 192.168.7.2.
* This opens up a website that runs on beaglebone black and click on Cloud9 IDE.
* The Cloud9 IDE window appears. Open a new terminal window on Cloud9 IDE.
* Type the command: $*ifconfig* -> gives the ethernet IP address.

1. **To remotely log in to Beaglebone black from an SSH client:**

* Here the Putty software acts as the SSH client for the windows platform.
* Open Putty and enter the IP address we got from step 2.
* A linux window terminal opens and asks to login.
* Login as: *root* and press enter.
* Type the command: $*nano test.py* -> to run a simple python program.
* GNU nano window appears. Type: (say) *print “Hello World”*
* To save: press *ctrl+o* and to get back to login window press *ctrl+x*
* To run the written program, type: *python test.py* -> tis command prints the output.
* To remove the program file, type: $*rm test.py*

1. **To connect beaglebone black with a remote desktop:**

* Install TightVNC viewer which is a remote desktop software application either from chrome or using the command $*sudo apt-get install tightvncserver*
* Type: $*tightvncserver* in the linux terminal window and now it asks for a password to set. Type a password and confirm it.
* Now its ready to run tightvncserver.
* To run it, type: $*vncserver :1 -geometry 1280x800 -depth 24 -dpi 96*
* Go back to pc, open tightvnc viewer that is installed and enter the remote host address that we got from step 1 followed by *:1* -> this indicates to play the 1st one and press connect.
* Enter the vnc password that was set up in the terminal window.
* A graphical user interface and a desktop of beaglebone black which we run remotely on pc pops up.
* Go to *Accessories* -> select *Lx terminal*
* Type: $*mkdir my\_python*
* Type: $*nano mypy.py* -> a GNU nano window appears. Type: (say) *print “BeagleBone Black-Getting Started!”*
* To run, type: *python test.py*
* Thus, the command prints the output on the window.