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.

2. 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.
- 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.

3. 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*

4. 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 it's 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.