**Raspberry PI – Session 2 – 21st Sept 2013**

**Useful Linux commands**

To use the following command, Open terminal window from desktop

*who* shows who is logged onto the PI

*ls –l* lists files in directory

*ssh* Open a secure connection with another computer / PI

*ifconfig* Shows details of IP address

*man* Show help details on Linux command and options

*sudo* Allows a command to be executed as a superuser or other user

*raspi-config* Not a Linux command, but allow various confiruration parameters to be changed, including starting SSH server. Need to prefix with sudo (ie. *sudo raspi-config*)

*startx* Starts the desktop

*apt-get* Used to install and remove applications

apt-get install package name

apt-get remove package name

*apt-cache search* Can be used to search for applications

apt-cache search game

*exit* Closes command window

**Accessing Raspberry PI from laptop using PuTTY**

On your laptop

Download PuTTY application from <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

Download ZIP file (putty.zip) & unzip

Run PUTTY application on your laptop

You will need to type in the IP address of the Raspberry PI.

To get the IP address on the PI, open a terminal window and type *ifconfig*

IP address will be listed on the line with inet addr: and will be something like 192.168.0.10

Log onto Raspberry PI using pi/raspberry as login name and password.

**Accessing Raspberry PI from laptop using Virtual Network Computing (VNC)**

Allows you to control the PIs desktop remotely

Need to install a VNC server application on PI and client application on laptop

We will use TightVNC

On the Raspberry PI.

Open a terminal window and use apt-get to install tightvnc server

*sudo apt-get install tightvncserver*

Run tightvnc server by typing *tightvncserver*

Enter password which will be used to access desktop via tightvnc client on laptop

On laptop

Download Tightvnc from <http://www.tightvnc.com/download.php>

Run *tightvnc-2.6.4-setup-32bit* to install TightVNC

From Start button, select TightVNC, then select TightVNCViewer

In the Remote Host field enter the IP address for PI and a port number (5901 should work)

192.168.0.x:5901

The Raspberry PI desktop is then displayed in a window, which you can use as if you were using the PI. Try starting Scratch.