Assignment A2

Title: Study of different operating systems for Raspberry Pi/ Beagle Board.

Problem Statement: Study of different operating systems for Raspberry-Pi/ Beagle Board. Understanding the process of OS installation on Raspberry-Pi/ Beagle Board.

Learning Objectives:

(i) To understand the different operating system for raspberry-Pi/ Beagle Board.

(ii) To understand the process of installation on raspberry Pi

Software and Hardware Requirements:

Raspberry-Pi/ Beagle Board,

PC with configuration as

Latest version of 64 bit OS, Open source Fedora-GHz, 8GB RA 500 GB HDD, 15' Color Monitor, Keyboard, Mouse.

Theory:

Different operating systems for Raspberry-Pi:

1) Raspbian
2) Ubuntu MATE
3) Snappy Ubuntu
4) Pidora
5) Linutop
6) SARPi
7) Arch Linux RAM
8) Gentoo Linux
9) Free BSD

Raspbian:

Installing Raspbian on the Raspberry Pi is pretty straightforward.
We'll be downloading Raspbian and writing the disc image to a microSD card, then booting the Raspberry Pi to that microSD card.

We will need a microSD card (go with at least 2GB), a computer with a slot for it, and of course, a Raspberry Pi and basic peripherals

The Raspbian disc image is compressed, so we'll need to unzip it.
The file uses the ZIP64 format, so depending on how current your built-in utilities are, you need to use certain programs to unzip it.
Linux users will use the appropriately named Unzip.
Write the disc image to your microSD card.

Then pop your microSD card into your computer and write the disc image to it.
You'll need a specific program to do this.

The process of actually writing the image will be slightly different across these programs, but it's pretty self explanatory

Then put the microSD card in your Pi and boot up.
Once the disc image has been written on the microSD, we're ready to go. Put that sucker into your Raspberry Pi, plug in the peripherals and power source

Different operating systems for Beagle Board:

Linux based:

(i) Android
(ii) Angstrom
(iii) Debian
(iv) Fedora
(v) Arch Linux
(vi) Buildroot
(vii) Gentoo
(viii) Sabayon
(ix) Ubuntu
(x) Yocto

Other / Non-Linux:

(i) MINIX 3
(ii) Windows Embedded Compact 7
(iii) Windows CE 6.0
(iv) Windows Embedded Compact 2013.

Conclusion: Different operating systems for Raspberry Pi / Beagle Board were studied.