Assignment 1

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Question 1: Short answer questions

1 . In our class lectures we have defined a software system as a set of complete pieces of software (subsystems) that can be used together and can communicate with each other. A software system usually has to contain a critical mass of subsystems.
Examples of software systems are: the Internet, the PC, etc.

2 . Unix is an Operating System. It's purpose is to integrate the various hardware components of a computer, and provide an interface for the user. Unix is a software system, because it is composed of several subsystems, such as the Kernel, the development environment, the user interface (shells), and the documentation. Some of those subsystems are composed of other, smaller subsystems.

3 . According to the Linux Documentation Project Manifesto, the Linux Documentation Project is a group of Linux enthusiasts whose declared mission is to collect, write, unify and standardize the available Linux documentation, and redistribute it freely under the Boilerplate, GPL or GNU Freebloc licence agreements. Anyone can contribute to this project.

4 . According to the statistics published on http://linuxcounter.net/places/stats.html on Jan 25th 2013, the top 3 Linux using countries in the world were, #1 the United States with 17,375, followed by Germany and Italy with 7,358 and 5,072 users respectively.

5 . Vi, Vim, Emacs and Pico are text editors that can be used inside the Unix shell. Some of them are very similar to each other and some are very different. All of those editors have been designed to be used inside a command line, but some can be used with a graphical interface as well (ex. Emacs).

6 . Despite Vi being an extremely popular text editor on Unix-like machines (36% of Linux magazine respondents were using it in 2009), I was unable to locate an official Vi commumity website. Vi comes installed with most major

*nix distributions.

Vim is a modified version of Vi and has an active user community at http://www.vim.org

Emacs is also popular, http://www.gnu.org/emacs

Pico was developed as a proprietary text editor, and it does not seem to have an active user community webpage in the top 5 Google search results. Nano, a free version of Pico is quite popular nonetheless.

7 . A Vi/Vim text editor is designed to be a simple, light-weight text editor, that is very powerful, very efficient, highly configurable and free to use. Vi is available on any Unix machine.

Emacs is a heavy-weight text editor, with numerous features. It supports numerous character sets and programming language highlighting. The GNU Emacs Manual calls Emacs the extensible, customizable, self-documenting real-time display editor. It has been developed by the GNU community, and is free to use, modify and distribute under GNU licence.