Assignment-10;

* Differences between Linux and windows xp / windows 2000 -

i) The system calls of both windows and linux are different.

Windows - CreateProcess(), ExitProcess(), WaitForSingleObject(), CreateFile(), ReadFile(), WriteFile(), CloseHandle(), SetConsoleMode(), ReadConsole(), WriteConsole(), GetCurrentProcessID(), SetTimer(), Sleep(), CreatePipe(), CreateFileMapping(), MapViewOfFile()

Linux - fork(), exit(), wait(), open(), read(), write(), close(), ioctl(), read(), write(), getpid(), alarm(), sleep(), pipe(), shmget(), mmap().

ii) Windows supports a relatively small number of filesystems (MSDOS, VFAT, NTFS). Linux supports a number of filesystem (ext2, ext3, ext4, MSDOS, VFAT, XFS, NTFS, XFS etc)

iii) Process is handled via kernel in windows. Various process are attached to the kernel directly. As a result deadlock occurs many times in windows. But in linux, kernel process and user process are differently handled. So, deadlock only occurs when hardware issues appear.

iv) windows ~~to~~ doesn't have the process scheduler but linux has the process scheduler.

v) ~~Windows~~ Linux is open-source but windows is not.

vi) Windows is a centeralized but linux destro is de-centeralized.

*Similarities between windows and linux—

i) Both have command-line interface and GUI.

ii) Both support FAT filesystem.

iii) Both used Priority Based algorithm for scheduling.

iv) Both have their own software-store.

v) Both provide firmware support.