Mehmet Furkan Sahin 21201385 CS-342 - Section 2 Ibrahim Korpeoglu

HW1

1- I installed Ubuntu 14.04 on virtual box.



**2-** Kernel executable is located in the file "kernel" under the directory usr/src/linux-headers-3.19.0-47-generic. And the version number can be deduced from the file name. Still, I run the code uname -r and the output was 3.19.0-47-generic

The closest kernel version was 3.18.26 in <u>kernel.org</u>. Thus, I downloaded it. Sub directories are as following;

- arch
- block
- crypto
- Documentation
- drivers
- firmware
- fs
- include
- init
- ipc
- kernel
- lib
- mm
- net

- samples
- scripts
- security
- sound
- tools
- usr
- virt

As it can also be seen from the following screen shot

mfs@mfs-VirtualBox:~/Downloads/linux-3.18.26\$ ls									
arch	Documentation	init	lib	README	sound				
block	drivers	ipc	MAINTAINERS	REPORTING-BUGS	tools				
COPYING	firmware	Kbuild	Makefile	samples	usr				
CREDITS	fs	Kconfig	mm	scripts	virt				
crypto	include	kernel	net	security					

**3-** The C program diff.c is written and provided with a makefile and sample input files.

4-

mfs@mfs-	VirtualBox:	~/Desktop\$ s	trace -c .	/diff A.ir	n B.in out
% time	seconds	usecs/call	calls	errors	syscall
0.00	0.000000	0	5		read
0.00	0.000000	0	1		write
0.00	0.000000	0	5		open
0.00	0.000000	0	5		close
0.00	0.000000	0	5		fstat
0.00	0.000000	0	10		mmap
0.00	0.000000	0	4		mprotect
0.00	0.000000	0	4		munmap
0.00	0.000000	0	3		brk
0.00	0.000000	0	3	3	access
0.00	0.000000	0	1		execve
0.00	0.000000	0	1		arch_prctl
400.00	0.00000		47		4-4-1
100.00	0.000000		47	3	total