EE463 **Lab. #8**

Operating System Lab. King Abdulaziz University Faculty of Engineering - ECE

/ 10

Name: Abdulrahman Bakhsh Id: 1936878

Solution

Simulator: pagetrans.py

Command: python ./pagetrans.py -a 4k -p 512 -r 256k -s 104

Solution:

Virtual Address Trace

VA 0x00000a53 (decimal: 2643)→	RA 0x000079cb [VPN= 6]	
VA 0x00000dcb (decimal: 3531)→	→ Not Valid	
VA 0x0000094d (decimal: 2381)→	Not Valid	
VA 0x00000642 (decimal: 1602)→	RA 0x00033a42 [VPN= 3]	
VA 0x00000528 (decimal: 1320)→	Not Valid	

Simulator: pagetablesize.py

Command: python ./pagetablesize.py -v 38 -e 2 -p 16k

Solution:

Virtual Address (VA) = [Virtual Page Number (VPN) | Offset (D)]

VA (bits)	VPN (bits)	D (bits)	pte (byte)
38	26	12	4

Calculate (Linear Page Table Size) and write the results in the simplest readable form (e.g. byte, KB, MB, GB, and TB)

Linear Page Table Size = 268,435,456 bytes $\rightarrow 262,144$ KB $\rightarrow 256$ MB