EE463 **Lab. #8** 

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

/ 10

Name: Mansour Alasias Id: 1944577

## **Solution**

**Simulator:** pagetrans.py

Command: python ./pagetrans.py -a 16k -p 4k -r 256k -s 101

**Solution:** 

Virtual Address Trace

VA 0x00000e30 (decimal: 3632)→	<b>RA</b> 0x00000CE30 [ <b>VPN=0</b> ]
VA 0x00001277 (decimal: 4727) →	<b>RA</b> 0x00003b277 [ <b>VPN=1</b> ]
VA 0x00002c50 (decimal: 11344)→	Invalid
VA 0x00000d97 (decimal: 3479)→	<b>RA</b> 0x0000cd97 [ <b>VPN=0</b> ]
VA 0x00003e26 (decimal: 15910)→	RA 0xde26 [VPN=3]

**Simulator:** pagetablesize.py

Command: python ./pagetablesize.py -v 38 -e 2 -p 4k

**Solution:** 

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

VA (bits)	VPN (bits)	D (bits)	pte (byte)
38	26	12	2

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** = 128MB