

Name: **Abdullah Alhethili**

Id: **1855911**

Solution

Simulator: pagetrans.py

Command: **python ./pagetrans.py -a 8k -p 512 -r 128k -s 104**

Solution:

Virtual Address Trace

VA 0x00001231 (decimal: 4657) →	RA 0xC831 [VPN= 9]
VA 0x00000335 (decimal: 821) →	RA 0x7535 [VPN= 1]
VA 0x00001320 (decimal: 4896) →	RA 0xC920 [VPN= 9]
VA 0x000019a8 (decimal: 6568) →	Invalid [VPN= 12]
VA 0x00001a7f (decimal: 6783) →	Invalid [VPN= 13]

Simulator: pagetablesizes.py

Command: **python ./pagetablesizes.py -v 38 -e 8 -p 2K**

Solution:

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

VA (bits)	VPN (bits)	D (bits)	pte (byte)
38	27	11	8

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 = 1.074 GB