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Solution

Simulator: pagetrans.py

Command: `python ./pagetrans.py -a 32k -p 8k -r 128k -s 105`

Solution:

Virtual Address Trace

VA 0x000014f7 (decimal: 5367) →	RA 0x64F7 (decimal 25847) [VPN = 0]
VA 0x00002c95 (decimal: 11413) →	RA 0x7C95 (decimal 31893) [VPN = 0]
VA 0x00006028 (decimal: 24616) →	RA 0xB028 (decimal 45096) [VPN = 0]
VA 0x000012e3 (decimal: 4835) →	RA 0x62E3 (decimal 25315) [VPN = 0]
VA 0x00005462 (decimal: 21602) →	RA 0xA462 (decimal 42082) [VPN = 0]

Simulator: pagetablesize.py

Command: `python ./pagetablesize.py -v 32 -e 16 -p 4k`

Solution:

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

VA (bits)	VPN (bits)	D (bits)	pte (byte)
32	20	12	16

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 = 16.78 MB