

```
[mac Lecture-Day12] ./paging-linear-translate.py -p 1024 -a 256 -P 16 -s 1005
```

```
ARG seed 1005  
ARG address space size 256  
ARG phys mem size 1024  
ARG page size 16  
ARG verbose False  
ARG addresses -1
```

The format of the page table is simple:

The high-order (left-most) bit is the VALID bit.

If the bit is 1, the rest of the entry is the PFN.

If the bit is 0, the page is not valid.

Use verbose mode (-v) if you want to print the VPN # by each entry of the page table.

Page Table (from entry 0 down to the max size)

```
0x00000000  
0x80000022  
0x80000024  
0x80000016  
0x8000001f  
0x80000014  
0x80000033  
0x80000025  
0x00000000  
0x80000015  
0x00000000  
0x00000000  
0x00000000  
0x00000000  
0x00000000  
0x00000000  
0x80000026
```

Virtual Address Trace

VA 0x00000064 (decimal: 100) --> PA or invalid address?

VA 0x0000005b (decimal: 91) --> PA or invalid address?

VA 0x000000d8 (decimal: 216) --> PA or invalid address?

For each virtual address, write down the physical address it translates to OR write down that it is an out-of-bounds address (e.g., segfault).