2^2=4	2^3=8	2^4=16	2^5=32	2^6=64	2^7=128	2^8=256	2^9=512	2^{10}=1024
2^{10}:Kilo	2^{20}:Mega	2^{30}:Giga	2^{40}:Tera	2^{50}:Peta	2^{60}:Exa	2^{70}:Zetta	2^{80}:Yotta	

1. **(Prob 7.4, 2 pts)** Consider a logical address space of 64 pages of 1,024 words each, mapped onto a physical memory of 32 frames
    a. How many bits are there in the logical address?
    b. How many bits are there in the physical address?

2. (**Prob 7.11, 12 pts**) There are currently six holes of various sizes (shown below in ascending address order).
    A:300K B:600K C:350K D:200K E:750K F:125K
    Five processes (shown in arrival order) of various sizes arrive at a system that uses variable-sized partition memory management. Where would each process be placed under the first-fit, best-fit, and worst-fit algorithms?

Process	First-Fit	Best-Fit	Worst-Fit
1: 115K			
2: 500K			
3: 358K			
4: 200K			
5: 375K			

Homework Chapter 8

1. (**Prob 8.3, 4 pts)**: Consider the page table shown in Figure 8.30 for a system with 12-bit virtual and physical addresses and with 256-but pages. *(Read the rest of the question from textbook)*

   (Write your answer in hexadecimal)

2. (**Prob 8.6, 3 pts)** An operating system supports a paged virtual memory. The CPU has a cycle time of 1 microsecond, *(Read the rest of the question from textbook)*

3. (**Prob 8.17, 3 pts)** What is the copy-on-write feature (*read the rest of the question from your textbook*)