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CSC 242-02
Week 13 HW Ch6

Page 390, Review Section, #s

1) SDRAM

3) PROM, EPROM, EEPROM

4) To represent the relative sizes of the memory.

7) Home projects, from taking a few tools then going back and exchanging them for others you need. Or Grocery store vs Home, as the grocery store being main memory and home being cache.

9) Cache is accessed by content, main memory is accessed by address.

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21) Caching behaves badly when data that is being accessed is just larger than the cache can hold, and the part that is accessed is not loaded in, so it is always loading into cache to access the data.

22) Dirty blocks are blocks that have been modified.

31) To provide a structure for implementing virtual memory.

33) An event that occurs when a requested page is not in main memory and must be copied.

34) When part of a programs memory is copied into memory but it isn't large enough to take up the full page and may not be needed.

37) Disadvantages include, extra time and resources being consumed. Advantages include, not needing to be concerned with memory size, and allowing for more multitasking.

39) External fragmentation results from allocation and deallocation creating small unusable chunks scattered around.

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A) 134217728 (2^{27}) Blocks

B) Tag: 32 bits, Block: 10 bits, Offset: 5 bits

C) Tag: 0, Block: 31F (1100011111) , Offset: 1A (11010). Maps to Block # 799 of 1024.