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CSCE-410
HW3

1) From the book "An absolute path name begins at the root and follows a path down to the specified file, giving the directory names on the path. A relative path name defines a path from the current directory. For example, in the tree-structured file system of Figure 11.11, if the current directory is root/spell/mail, then the relative path name prt/first refers to the same file as does the absolute path name root/spell/mail/prt/first. "

2) - Link is effectively a pointer to another file or subdirectory.
    - Duplicate directory entries, the information about them in sharing directories, these would be considered identical and equal.

3) Answer: Let Z be the starting file address (block number).
    a) Contiguous. Divide the logical address by 512 with X and Y the resulting quotient and remainder respectively.
        i.Add X to Z to obtain the physical block number. Y is the displacement in to that block.
        ii. 1
    b) Linked. Divide the logical physical address by 511 with X and Y the resulting quotient and remainder respectively.
        i. Chase down the linked list(getting X + 1 blocks). Y+1 is the displacement in to the last physical block.
        ii. 4
    c) Indexed. Divide the logical address by 512 with X and Y the resulting quotient and remainder respectively.
        i. Get the index block into memory. Physical block address is contained in the index block at location X. Y is the displacement into the desired physical block.
        ii. 2

4)
    a. The FCFS schedule is 143, 86, 1470, 913, 1774, 948, 1509, 1022,1750, 130.The total seek distance is 7081.
    b. The SSTF schedule is 143, 130, 86, 913, 948, 1022, 1470, 1509, 1750,1774. The total seek distance is 1745.
    c. The SCAN schedule is 143, 913, 948, 1022, 1470, 1509, 1750, 1774,4999, 130, 86

.The total seek distance is 9769.
d. The LOOK schedule is 143, 913, 948, 1022, 1470, 1509, 1750, 1774,130, 86.
The total seek distance is 3319.

5)

6)

Contiguous	Linked	Indexed
201	1	1
101	52	1
1	3	1
198	1	0
98	52	0
0	100	0