

CSCI-3753: Operating Systems

Fall 2019

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Week 14

- > Final Exam Practice Problem
- > FCQs



Practice Problem

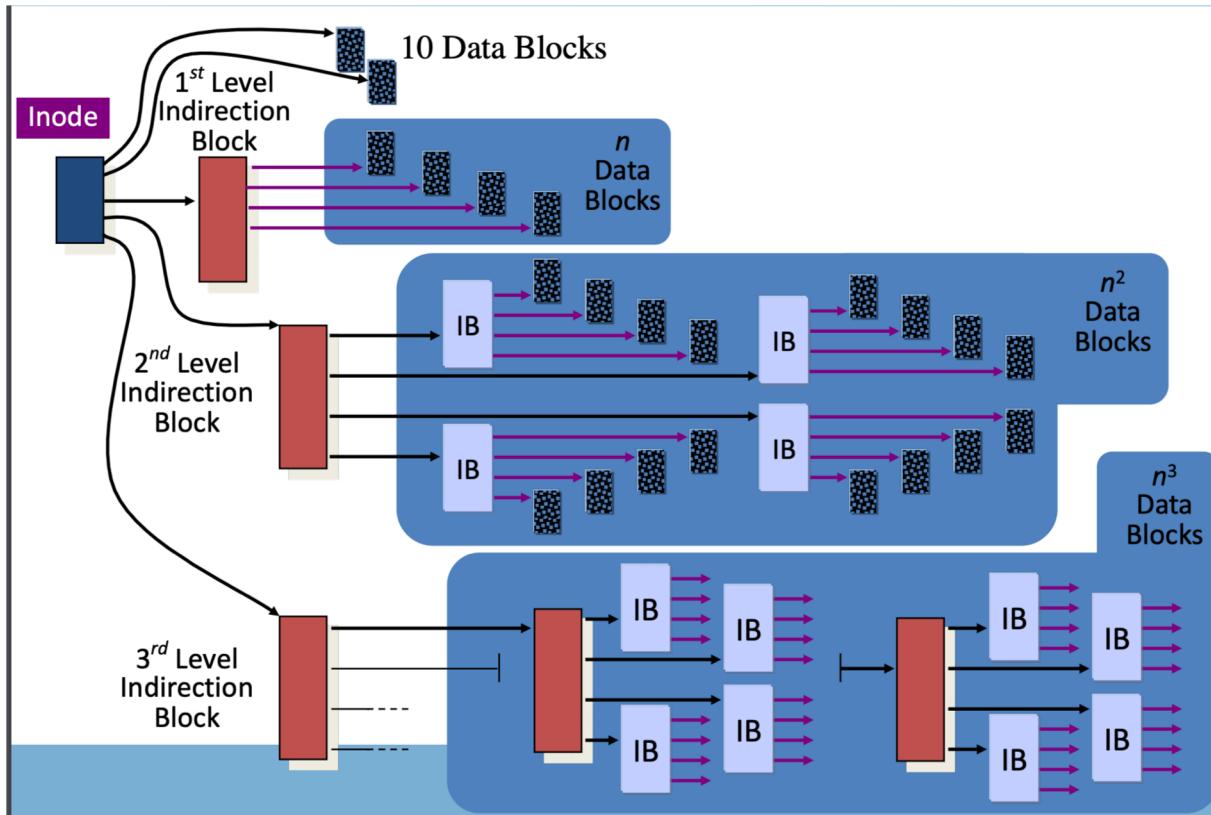
1. You are asked to allocate a file according to the multi-level indexed allocation (UNIX inode - triply indirect). Assume that the memory block pointers to support a file containing 200K bytes of data. There are 1 KB per disk block, an index block holds 64 entries, and there are 12 direct pointers in the inode. Fill in the details of how many disk blocks are allocated for this file (NOT including the inode itself).

1. # blocks in direct blocks = _____
2. # blocks in single indirect = _____
3. # blocks in double indirect = _____
4. # blocks in triple indirect = _____
5. # metadata blocks = _____





Recall Inodes





Practice Problem Solution

You are asked to allocate a file according to the multi-level indexed allocation (UNIX inode - triply indirect). Assume that the memory block pointers to support a file containing 200K bytes of data. There are 1 KB per disk block, an index block holds 64 entries, and there are 12 direct pointers in the inode. Fill in the details of how many disk blocks are allocated for this file (NOT including the inode itself).

1. # blocks in direct blocks = **12**
2. # blocks in single indirect = **65**
3. # blocks in double indirect = **127**
4. # blocks in triple indirect = **0**
5. # metadata blocks = **4**





Where you can find me outside of ECAE!

If you want to talk about Full Time Job Search, Internships, Grad School, Robotics, Machine Learning, Web Development (just maybe not Operating Systems).

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Thank You
&
Happy Holidays