

Inode practice:

Assume we have a hard disk as below. Each block is 1KB. The block address is 4 Byte. The size of inode is 256 Byte. There is one block dedicated to store inodes. Use the diagram to demonstrate how files are stored in a Unix-based file system.

Instructions:

- 1) Divide the inode block into individual inode entry, so each inode is a row;
- 2) Further divide each inode (row) into columns to indicate the following information: file size, 2 direct block pointers, 1 indirect block pointer.
- 3) For the data blocks taken by a file, just put the file name into that block.

Question:

- 1) What is the maximal file size supported?

Tasks:

- 1) Store file0 with size of 2KB;
- 2) Store file1 with size of 4KB;

