

In this task, you get an opportunity to work on a database design similar to the one that is currently being used in ImageKit's media library as well.

We need to create a directory structure with folders and files in it. For creating this, you need to store the information about these folders and files in any database of your choice. The folder structure would look something like this

/ (root)

- Folder1
  - File1.png
  - File2.png
- Folder2
  - SubFolder1
  - SubFolder2
    - File3.jpg
    - File4.txt

Along with the above directory structure information, we should also be able to store information about a file, like

- Format
- Size in KBs
- Dimensions

Expectations

- A. No UI implementation or APIs are needed, just the design and queries is sufficient at this stage**
- B. If you are not familiar with databases, you can skip writing the queries, but we do expect you to provide a logically correct solution to perform the tasks “2.a” to “2.g”.**

1. The database design / schema
2. The queries or any other code or logic that would need to be run on that database to achieve the following tasks
  - a. Insert a new folder or file at any level (root or inside a folder)
  - b. Get list of all files reverse sorted by date
  - c. Find the total size of a folder (like total size of files contained in Folder2 which would include size of files File3.jpg and File4.txt)
  - d. Delete a folder
  - e. Search by filename
  - f. Search for files with name “File1” and format = PNG
  - g. Rename SubFolder2 to NestedFolder2