Algorithm_1:

Maintain a variable for each of the drive accounts to determine available memory.

If storage for current account overflows then split the file according to size and maintain a mapping in a database and store the slitted file in different accounts at back-end(cloud).

Algorithm_2:

Maintain a variable for each of the cloud service provider to determine available memory of each of these.

Basic Idea: Use simple **Ratio and proportion** of mathematics.

Ex-if a file of 100MB is to be splitted among :

Google Drive:15GB, SkyDrive:7GB, Ubuntu one:5GB

Then file is to be divided in ratio of 15:7:5.

Thus 1^{st} part in Google Drive gets=(15/27)*100

2^{nd} part in Skydrive =(7/27)*100

Ubuntu = (5/25)*100

To Save File on cloud:

- Put all cloud objects(drive, skydrive, Ubuntu one)in a max priority queue.
- Extract an object till queue is not empty.
- Save respective parts in order(of file bytes) with size mentioned above.

Thus a file say **avengers.avi** is parted into 3 parts say:

1. avengers.avi.part1 on Google Drive.
2. Avengers.avi.part2 on sky drive.
3. Avengers.avi.part3 on Ubuntu one.

Download file to your desktop:

- Bring parts of file from respective cloud and merge them(reverse of splitting).

File Search:

- Search in only one of the drive for filename.

File Sharing:

- Create a public URL for the file to be shared such that when you hit this url in your browser file downloads to your desktop (same procedure as above).

Delete:

- To delete a file put different parts of file in their respective cloud’s trash or on permanently delete them.

Managing folders:

- if you create a new folder in UI and put a file in it then in corresponding backend cloud providers a folder is created and part of corresponding file is placed in it.