## **Problem: File System**

Let's consider a scenario where we have a hierarchical data structure representing a file system. Each file or folder has a unique identifier, a name, a parent ID to denote its containing folder, and a size in bytes. The goal is to get a result set showing the total size of each folder and its subfolders in the file system.

Here's how you can approach this more challenging problem:

Suppose we have a table named "FileSystem" with the following columns:

- NodeID (unique identifier for each file/folder)
- NodeName (name of the file/folder)
- **ParentID** (ID of the parent folder)
- **SizeBytes** (size of the file/folder in bytes)

## Table: FileSystem

NodeID	NodeName	ParentID	SizeBytes
1	Documents	NULL	NULL
2	Pictures	NULL	NULL
3	File1.txt	1	500
4	Folder1	1	NULL
5	Image.jpg	2	1200
6	Subfolder1	4	NULL
7	File2.txt	4	750
8	File3.txt	6	300
9	Folder2	2	NULL
10	File4.txt	9	250

## Sample Output

NodeID	Nodename	sizeBytes
1	Documents	1550
2	Pictures	1450
3	File1.txt	500
4	Folder1	1050
5	Image.jpg	1200
6	Subfolder1	300
7	File2.txt	750
8	File3.txt	300
9	Folder2	250
10	File4.txt	250