Conversion to BIDS Format

Converting data to the BIDS (Brain Imaging Data Structure) format involves several steps to properly organize and structure your data. Below is a clear step-by-step guide:

1. Prepare the Initial Folder Structure

- Create a main folder called `DATA`.
- Inside `DATA`, create two folders: `bids` and `raw`.
- Place your DICOM images inside a folder named (for example) `dcm` within the `raw` folder.

2. Navigate to the Directory

- Go to the directory where your `raw` folder is located.

```
cd raw
```

3. Check the Contents of the `raw` Folder

- List the contents of the `raw` folder.
  You should see subfolders named like `01`, `02`, `03`, etc., each corresponding to a different subject.

```
dir
(or ls on Unix-based systems)
```

4. Install DicomSorter

- Install the `dicomsorter` package using pip:

```
pip install dicomsorter
```

5. Sort Directories Using DicomSorter

- Use `dicomsorter` to organize your DICOM files.
- Replace `./01/` with the path to your subject's DICOM folder, and `./sub-01/` with the desired output folder.

```
dicomsorter ./01/ ./sub-01/
```

6. Install BidsCoin

- Install the `bidscoin` package using pip:

```
pip install bidscoin
```

7. Go Back to the `DATA` Folder

- Return to the main `DATA` folder.

```
cd ..
```

8. Map Raw Data to BIDS Structure

- Use `bidsmapper` to map your raw data into the BIDS folder.
- Adjust your configuration files according to your processing needs.

```
bidsmapper raw bids
```

9. (Optional) Edit the Mapping

- Open the BIDS editor to review and modify the mapping if necessary.

```
bidseditor -b ./bids/code/bidsmap bids
```

10. Finalize the Conversion to BIDS

- Use `bidscoiner` to complete the conversion of your data to the BIDS format.

```
bidscoiner raw bids
```

Important Notes:

- Replace all folder names and paths with the ones you are using.
- Pay attention to any error messages or additional requirements mentioned in the specific tutorials you follow.