👁 **Solution exercise 1**: create a BIDS-compliant dataset

As specified in the introduction, all files are empty and the following error cannot be fixed:

Error 1: [Code 44] FILE_READ

We were unable to read this file. Make sure it contains data (file size > 0 kB) and is not corrupted, incorrectly named, or incorrectly symlinked.

To be compliant with BIDS, the files of the sample dataset should be named and structured in folders as follows:

Error 1: [Code 1] NOT_INCLUDED

ds001-corrupted/sub-03/func/sub-03_task-balloonanalogrisktask_run-03_fmri.nii.gz →
ds001-corrupted/sub-03/func/sub-03_task-balloonanalogrisktask_run-03_bold.nii.gz

Error 1: [Code 1] NOT_INCLUDED

ds001-corrupted/sub-15/participants.tsv →
ds001-corrupted/participants.tsv

👁 **Solution exercise 2**: interact with BIDS dataset in Python

```python
# Import the BIDSLayout class from pybids
from bids import BIDSLayout

# Create the BIDSLayout object representing the BIDS dataset
layout = BIDSLayout("/tmp/tuto/bids-examples-master/ds001")

# Get the list of T1w images available for sub-01
t1_files = layout.get(subject="01", extension="nii.gz", suffix="T1w",
                      return_type="filename")
print(t1_files)

# Get the list of functional MRI images available for sub-01
fmri_query = {
    "subject": "01",
    "extension": "nii.gz",
    "suffix": "bold",
    "return_type": "filename"
}
fmri_files = layout.get(**fmri_query)
print(fmri_files)

# Get the list of the functional MRI tasks available
fmri_tasks = layout.get_tasks()

# Get the associatetd events files
event_files = layout.get(subject="01", suffix="events",
                         return_type="filename")
print(event_files)
```