

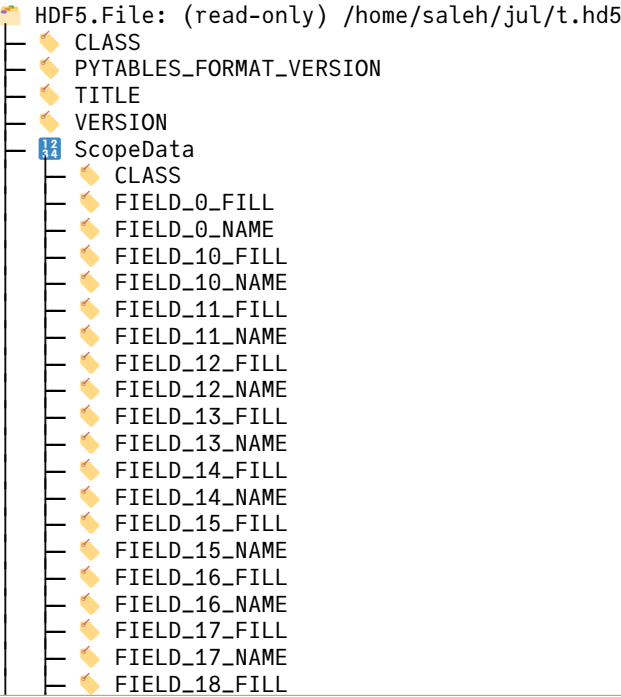
Date: 5 Jul, 22

First implementation of HDF5 r/w in Julia

## Importing needed libraries

```
• try # Trying to import
•   using HDF5, H5Zblosc, H5Zbzip2, H5Zlz4, H5Zzstd
•
• catch # Installing - if there are not added yet - and importing them
•
•   begin
•     using Pkg; Pkg.add("HDF5, H5Zblosc, H5Zbzip2, H5Zlz4, H5Zzstd")
•     using HDF5, H5Zblosc, H5Zbzip2, H5Zlz4, H5Zzstd
•   end
•
• end
```

## Working with the .hd5 file



HDF5.File: (read-only) /home/saleh/jul/t.hd5

- CLASS
- PYTABLES\_FORMAT\_VERSION
- TITLE
- VERSION
- ScopeData
  - CLASS
  - FIELD\_0\_FILL
  - FIELD\_0\_NAME
  - FIELD\_10\_FILL
  - FIELD\_10\_NAME
  - FIELD\_11\_FILL
  - FIELD\_11\_NAME
  - FIELD\_12\_FILL
  - FIELD\_12\_NAME
  - FIELD\_13\_FILL
  - FIELD\_13\_NAME
  - FIELD\_14\_FILL
  - FIELD\_14\_NAME
  - FIELD\_15\_FILL
  - FIELD\_15\_NAME
  - FIELD\_16\_FILL
  - FIELD\_16\_NAME
  - FIELD\_17\_FILL
  - FIELD\_17\_NAME
  - FIELD\_18\_FILL

```
• begin
•
•   # Specifying the directory
•   fileDir = "/home/saleh/jul/t.hd5"
•
•   # Opening the file in a protected-read-only permission
•   File = HDF5.h5open(fileDir, "r")
•
• end
```

## Preprocessing

In this stage, we store the data into a dictionary. Keys are the names of datasets and values are some arrays of NamedTuples.

```
• begin
•
•   Data = Dict()
•
•   for name in keys(File)
•     Data[name] = read(File[name])
•   end
•
• end
```