

```
In [1]: import pandas
        pandas.__version__
```

```
Out[1]: '0.10.1.dev-cef33d5'
```

```
In [2]: r_store = pandas.HDFStore("Data/tutorial1.h5")
```

```
In [3]: r_store
```

```
Out[3]: <class 'pandas.io.pytables.HDFStore'>
        File path: Data/tutorial1.h5
        Empty
```

```
In [4]: list(r_store.handle.walkGroups())
```

```
Out[4]: [/ (RootGroup) 'Test file'
         children := ['detector' (Group), 'columns' (Group)],
         /columns (Group) 'Pressure and Name'
         children := ['pressure' (Array), 'name' (Array)],
         /detector (Group) 'Detector information'
         children := ['readout' (Table)]]
```

```
In [5]: list(r_store.handle.walkNodes())
```

```
Out[5]: [/ (RootGroup) 'Test file'
         children := ['detector' (Group), 'columns' (Group)],
         /columns (Group) 'Pressure and Name'
         children := ['pressure' (Array), 'name' (Array)],
         /detector (Group) 'Detector information'
         children := ['readout' (Table)],
         /columns/name (Array(3,)) 'Name column selection'
         atom := StringAtom(itemsize=16, shape=(), dflt='')
         maindim := 0
         flavor := 'python'
         byteorder := 'irrelevant'
         chunkshape := None,
         /columns/pressure (Array(3,)) 'Pressure column selection'
         atom := Float64Atom(shape=(), dflt=0.0)
         maindim := 0
         flavor := 'numpy'
         byteorder := 'little'
         chunkshape := None,
         /detector/readout (Table(10,)) 'Readout example'
         description := {
           "ADCcount": UInt16Col(shape=(), dflt=0, pos=0),
           "TDCcount": UInt8Col(shape=(), dflt=0, pos=1),
           "energy": Float64Col(shape=(), dflt=0.0, pos=2),
           "grid_i": Int32Col(shape=(), dflt=0, pos=3),
           "grid_j": Int32Col(shape=(), dflt=0, pos=4),
           "idnumber": Int64Col(shape=(), dflt=0, pos=5),
           "name": StringCol(itemsize=16, shape=(), dflt='', pos=6),
           "pressure": Float32Col(shape=(), dflt=0.0, pos=7)}
         byteorder := 'little'
         chunkshape := (1394,)]
```

```
In [6]: r_store.keys()
```

```
Out[6]: []
```

```
In [7]: r_store.root.detector.readout
```

```
Out[7]: /detector/readout (Table(10,)) 'Readout example'
description := {
  "ADCcount": UInt16Col(shape=(), dflt=0, pos=0),
  "TDCcount": UInt8Col(shape=(), dflt=0, pos=1),
  "energy": Float64Col(shape=(), dflt=0.0, pos=2),
  "grid_i": Int32Col(shape=(), dflt=0, pos=3),
  "grid_j": Int32Col(shape=(), dflt=0, pos=4),
  "idnumber": Int64Col(shape=(), dflt=0, pos=5),
  "name": StringCol(itemsize=16, shape=(), dflt='', pos=6),
  "pressure": Float32Col(shape=(), dflt=0.0, pos=7)}
byteorder := 'little'
chunkshape := (1394,)
```

```
In [8]: r_store.select("detector/readout")
```

```
-----
Exception                                 Traceback (most recent call last)
<ipython-input-8-2193320b6f87> in <module>()
----> 1 r_store.select("detector/readout")
```

```
/home/engineer/CodeBase/Development/PANDAS/lib/python2.7/site-packages/pandas-
0.10.1.dev_cef33d5-py2.7-linux-i686.egg/pandas/io/pytables.pyc in select(self,
key, where, start, stop, columns, **kwargs)
```

```
    350         if group is None:
    351             raise KeyError('No object named %s in the file' % key)
--> 352         return self._read_group(group, where=where, start=start,
stop=stop, columns=columns, **kwargs)
    353
    354     def select_as_coordinates(self, key, where=None, **kwargs):
```

```
/home/engineer/CodeBase/Development/PANDAS/lib/python2.7/site-packages/pandas-
0.10.1.dev_cef33d5-py2.7-linux-i686.egg/pandas/io/pytables.pyc in
_read_group(self, group, **kwargs)
```

```
    784
    785     def _read_group(self, group, **kwargs):
--> 786         s = self._create_storer(group)
    787         s.infer_axes()
    788         return s.read(**kwargs)
```

```
/home/engineer/CodeBase/Development/PANDAS/lib/python2.7/site-packages/pandas-
0.10.1.dev_cef33d5-py2.7-linux-i686.egg/pandas/io/pytables.pyc in
_create_storer(self, group, value, table, append, **kwargs)
```

```
    692         tt = 'generic_table'
    693         else:
--> 694             raise Exception("cannot create a storer if the
object is not existing nor a value are passed")
    695         else:
    696
```

```
Exception: cannot create a storer if the object is not existing nor a value are
passed
```

```
In [9]: r_store.close()
```