

Cheat sheet: Exceptions

Handling exceptions

```
try:  
    some code  
except ExceptionClass1:  
    runs if ExceptionClass1 raised  
except ExceptionClass2:  
    runs if ExceptionClass2 raised  
else:  
    code if no exception raised
```

First clause with matching exception class is executed (note: derived subclasses also match!)

Inspecting exception data

```
except ExceptionClass as exc:  
str(exc)      exception as string  
exc.args()   exception arguments (content  
              depends on the exception class)
```

Raising exceptions

```
raise ExceptionClass(errormsg)  
errormsg      Error message  
              (eventual further arguments  
              possible)
```

Testing on exceptions in py.test

```
with pytest.raises(ExceptionClass):  
    do something  
→fails if exception is not raised
```

New exceptions via inheritance

```
class NewError(ParentClass):  
    pass
```

If needed, `__init__()` can be overridden and further methods can be added.

Cheat sheet: Sphinx / Restructured text

Restructured text cheat sheets

[ralsina / rst-cheatsheet \(GitHub\)](#)

[docutils / quickref \(SourceForge\)](#)

Starting sphinx-project

```
mkdir docs
```

```
cd docs
```

```
sphinx-quickstart
```

Important extensions (conf.py)

```
extensions =  
'sphinx.ext.autodoc',  
'sphinx.ext.napoleon',  
'sphinx.ext.mathjax',  
...  
]
```

Generating documentation

```
make html
```

```
make latexpdf
```

Table of content

```
.. toctree::  
   :maxdepth: 2
```

```
   some_rst_file_to_include
```

```
   other_rst_file_to_include
```

Auto-documentation

```
.. automodule:: solvers  
   :members:
```