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# stateflow Documentation

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# CHAPTER 1

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## Examples

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### 1.1 Operator example

```
>>> from stateflow import var, assign
>>> a = var(1)
>>> b = var(2)
>>> a_plus_b = a + b
>>> print(a_plus_b)
3
>>> assign(a, 4)
>>> print(a_plus_b)
6
```

### 1.2 Function example

```
>>> from stateflow import var, assign, reactive
>>> a = var(1)
>>> b = var(2)
>>>
>>> @reactive
... def elaborate(a, b):
...     return "{} + {} = {}".format(a, b, a+b)
>>>
>>> text = elaborate(a, b)
>>> print(text)
1 + 2 = 3
>>> assign(a, 4)
>>> print(text)
4 + 2 = 6
```

Todo:

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- ev
- exception handling (many examples)
- reactive\_finalizable
- volatile

## 1.3 API Reference

Contents:

Exceptions definitions.

**exception** stateflow.errors.**ArgEvalError** (*arg\_name, function\_name, call\_stack, cause*)

A reactive argument is in error state. The argument error should be the cause of this error.

**exception** stateflow.errors.**EvalError** (*definition\_stack, cause*)

An exception occurred while evaluation of some Observable.

**exception** stateflow.errors.**NotAssignable**

Raised when the “`__assign__`” method is called on the Observable that doesn’t support assignment.

**exception** stateflow.errors.**NotInitializedError**

**exception** stateflow.errors.**SilentError** (*cause=None, \*args*)

An exception that is silently propagated and not raised unless explicit unwrapping is done on the variable. The error that is silenced should be the cause of this error.

**exception** stateflow.errors.**ValidationException** (*description*)

An argument doesn’t satisfy some criterion so the function is not called.

## CHAPTER 2

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### Indices and tables

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## Python Module Index

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