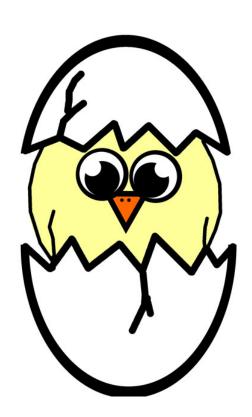
\mathbf{H} a
t \mathbf{c} h - A Python Preprocessor

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1 Getting Started

All Hatch statements begin with a special Hatch comment identifier (#!). If the Hatch comment identifier is not present, the line will be treated as interpretable Python code. All lines beginning with #! will "hatch" into interpretable Python code, given the correct Hatch syntax.

2 Keywords

- 1. **class** Used to define a Python class in Hatch.
- 2. **get** Used to define an attributes getter/getters in Hatch.
- 3. set Used to define an attributes setter/setters in Hatch.
- 4. **str** Used to define a classes toString() method in Hatch.
- 5. **hatch()** Used to exit a Hatch interactive shell.

3 The Hatch Egg

The Hatch egg is where parameter and attribute names are passed. An egg consists of a comma delimited list of variable names surrounded by parenthesis. An empty hatch egg will result in the following error: *Empty egg to be hatched, aborting.*.

4 Syntax

1. Class Declarations

```
\#! class Person = (name, age, ...)
```

2. Getter Declarations

$$\#! \text{ get} = (\text{name, age, ...})$$

3. Setter Declarations

$$\#! \text{ set} = (\text{name, age, ...})$$

4. toString() Declarations

```
\#! \text{ str} = (\text{name, age, ...})
```

5. Variable Declarations

```
#! name = 'Addison'
#! age = 20
#! age = 20.0
```

5 Hello Hatch

```
# HelloHatch.Hatch
import sys

#! class HelloHatch = (hello, hatch)
    #! get = (hello, hatch)
    #! set = (hello, hatch)

#! str = (hello, hatch)

def main(argv):
    hello_hatch = HelloHatch("Hello", "Hatch!")
    print(hello_hatch)

if(__name__ == "__main__"):
    main(sys.argv[1:])
```

make -B

 $./interpreter.out\ HelloHatch.Hatch > HelloHatch.py$

```
# HelloHatch.py
import sys
```

```
class HelloHatch(object):
  def __init__(self,hello,hatch):
     self.hello = hello
     self.hatch = hatch
  def get_hello(self):
     return self.hello
  def get_hatch(self):
     return self.hatch
  def set_hello(self,hello):
     self.hello = hello
  def set_hatch(self,hatch):
     self.hatch = hatch
  def __str__(self):
     return str(self.hello) + ' ' + str(self.hatch)
def main(argv):
  hello_hatch = HelloHatch("Hello", "Hatch!")
  print(hello_hatch)
if(__name__ == "__main__"):
  main(sys.argv[1:])
```

python3 HelloHatch.py

Hello Hatch!