1. **class** Thing:

**pass**

print(Thing)

example **=** Thing()

print(example)

2. **class** Thing2:

letters **=** 'abc'

print(Thing2**.**letters)

3. **class** Thing3:

**def** \_\_init\_\_(self):

self**.**letters **=** 'xyz'

print(Thing3**.**letters)

something **=** Thing3()

print(something**.**letters)

4. **class** Element:

**def** \_\_init\_\_(self, name, symbol, number):

self**.**name **=** name

self**.**symbol **=** symbol

self**.**number **=** number

hydrogen **=** Element('Hydrogen', 'H', 1)

5. el\_dict **=** {'name': 'Hydrogen', 'symbol': 'H', 'number': 1}

hydrogen **=** Element(el\_dict['name'], el\_dict['symbol'], el\_dict['number'])

hydrogen**.**name

6. **class** Element:

**def** \_\_init\_\_(self, name, symbol, number):

self**.**name **=** name

self**.**symbol **=** symbol

self**.**number **=** number

**def** dump(self):

print('name=%s, symbol=%s, number=%s' **%**(self**.**name, self**.**symbol, self**.**number))

hydrogen **=** Element(**\*\***el\_dict)

hydrogen**.**dump()

7. print(hydrogen)

**class** Element:

**def** \_\_init\_\_(self, name, symbol, number):

self**.**name **=** name

self**.**symbol **=** symbol

self**.**number **=** number

**def** \_\_str\_\_(self):

**return** ('name=%s, symbol=%s, number=%s' **%**(self**.**name, self**.**symbol, self**.**number))

hydrogen **=** Element(**\*\***el\_dict)

print(hydrogen)

8. **class** Element:

**def** \_\_init\_\_(self, name, symbol, number):

self**.**\_\_name **=** name

self**.**\_\_symbol **=** symbol

self**.**\_\_number **=** number

@property

**def** name(self):

**return** self**.**\_\_name

@property

**def** symbol(self):

**return** self**.**\_\_symbol

@property

**def** number(self):

**return** self**.**\_\_number

hydrogen **=** Element('Hydrogen', 'H', 1)

hydrogen**.**name

hydrogen.symbol

hydrogen.number

9. **class** Bear:

**def** eats(self):

**return** 'berries'

**class** Rabbit:

**def** eats(self):

**return** 'clover'

**class** Octothorpe:

**def** eats(self):

**return** 'campers'

b **=** Bear()

r **=** Rabbit()

o **=** Octothorpe()

print(b**.**eats())

print(r**.**eats())

print(o**.**eats())

10. **class** Laser:

**def** does(self):

**return** 'disintegrate'

**class** Claw:

**def** does(self):

**return** 'crush'

**class** SmartPhone:

**def** does(self):

**return** 'ring'

**class** Robot:

**def** \_\_init\_\_(self):

self**.**laser **=** Laser()

self**.**claw **=** Claw()

self**.**smartphone **=** SmartPhone()

**def** does(self):

**return** '''I have many attachments:

My laser, to %s.

My claw, to %s.

My smartphone, to %s.''' **%** (self**.**laser**.**does(),self**.**claw**.**does(),self**.**smartphone**.**does() )

robbie **=** Robot()

print( robbie**.**does())