

New York University
School of Continuing and Professional Studies
Division of Programs in Information Technology

Introduction to Python
Exercise Solutions, Session 10

Ex. 10.1 Create a class called ThisClass with the statement `class ThisClass(object):` and create one method inside the class with the statement `def report(self):`.

```
class ThisClass(object):  
  
    def report(self):  
        print(id(self))  
  
a = ThisClass()  
b = ThisClass()  
c = ThisClass()  
  
a.report()  
  
b.report()  
c.report()  
print()  
  
print((id(a)))  
print((id(b)))  
print((id(c)))
```

Ex. 10.2 Create a class, `TimeStamp(object)`: that can store the current timestamp in an instance attribute.

```
import datetime  
  
class TimeStamp(object):  
  
    def set_time(self):  
        self.t = str(datetime.datetime.now())  
  
    def get_time(self):  
        return self.t  
  
var1 = TimeStamp()  
var2 = TimeStamp()  
var1.set_time()  
var2.set_time()  
print(var1.get_time())  
print(var2.get_time())  
print()  
var1.set_time()  
print(var1.get_time())  
  
print(var2.get_time())
```

Ex. 10.3 Copy the above code, and this time replace the `set_time()` method with the constructor, `__init__(self)`.

```
import datetime

class TimeStamp(object):

    def __init__(self):
        self.t = str(datetime.datetime.now())

    def get_time(self):
        return self.t

var1 = TimeStamp()
var2 = TimeStamp()
print(var1.get_time())
print(var2.get_time())
print()
print(var1.get_time())

print(var2.get_time())
```
