1. For the following class definition:

```
class Thing:
```

```
def __init__(self, a, b):
    self.x = 10
    self.y = 2*a
    self.z = b

def getV1(self):
    return self.x + self.y

def getV2(self):
    return self.z

def setAttributes(self,c,d):
    self.x = c
    self.y = d
```

- a) circle the constructor and "frame in rectangles" the other methods of the class
- b) underline the instance variables
- c) draw the class diagram

d) what are the values of self.x, self.y and self.x when an object a of class Thing is created by calling a = Thing(2, [a, b, c])?

```
self.x =
self.y =
self.z =
```

e) what values are returned by the calls a.getv1() and a.getv2()?

2. Define a class Person.

Each person has a name: <First Name> <Middle Name> <Last Name> Each person has height (in inches), weight (in pounds), age. Usually people have SSN, phone number, e-mail address and postal address.

There is more, but let's stop here.

- these are instance variables

We can get person's height, weight, age, name, SSN, phone number, e-mails address and postal address. We can also change them.

- these are methods.

Assume that the constructor takes only name and SSN as parameters .

Here is a suggested class diagram that you can use to define the class:

Person	
name height weight age	ssn phoneNumber Email address
getName() getHeight() getWeight() getAge() getSSN() getPhone() getEmail() getAddress()	setName(name) setHeight(h) setWeight(w) setAge(a) setSSN(ssn) setPhone(phone) setEmail(email) setAddress(address)

Define the class Person, then use the code from inClassWork2.py to test it.