

1. For the following class definition:

class Thing:

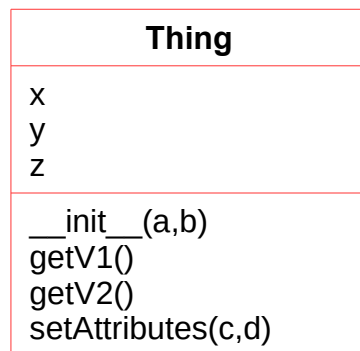
```
def __init__(self, a, b):
    self.x = 10
    self.y = 2*a
    self.z = b
```

```
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
```

- circle the constructor and “frame in rectangles” the other methods of the class
- underline the instance variables
- 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 = 10`

`self.y = 4`

`self.z = [a,b,c]`

e) what values are returned by the calls `a.getV1()` and `a.getV2()` ?

14 and [a,b,c]

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

Define the class Person, then use the code from [inClassWork2.py](#) to test it.