


Common Python *Class* Errors

I. Putting *import* statements in the wrong place: put all such statements at start of the file, and *not* in functions.

```
from Bio import GenBank
import string

class Spazz:
    def do_something(self, x):
        import string
        from Bio import Fasta
        new_str = string.upper(x)
        return new_str
```



II. Incorrect use of *self*.

#Incorrect Usage

```
class Eq:
    def __init__(self, data=0):
        "Initialize data members of class"
        self.data = data #Holds class data from equations

    def return_results(self, x, y):
        "Returns results of simple equation given two values"
        self.result = self.x/2*self.y**3
        self.data = self.result
```

#Correct Usage

```
class Eq:
    def __init__(self, data=0):
        "Initialize data members of class"
        self.data = data #Holds class data from equations

    def return_results(self, x, y):
        "Returns results of simple equation given two values"
        result = x/2*y**3
        self.data = result
        return result
```

III. Calling other class functions within a class function.

```
class Eq:
    def __init__(self, data=0):
        "Initialize data members of class"
        self.data = data #Holds class data from equations

    def return_results(self, x, y):
        "Returns results of simple equation given two values"
        result = x/2*y**3
        return result

    def more_results(self, x1, y1, z):
        "Returns results of simple equation given two values"
        value = self.return_results(x1,y1) #Calling other functions
        new_value = value*(z/4)
        self.data = new_value

#After importing/execfiling the class into interpreter
>>> ob = Eq()
>>> ob.return_results(3,4.5)
91.125
>>> ob.data
0
>>> ob.more_results(7,5,20.1)
>>> ob.data
1884.3750000000002
```

IV. Comment on comments

```
class Eq:
```

```
    def __init__(self, data=0):
```

```
        "Initialize data members of class"
```

```
        self.data = data #Holds class data from equations
```

```
    def return_results(self, x, y):
```

```
        "Returns results of simple equation given two values"
```

```
        result = x/2*y**3
```

```
        return result
```

```
    def more_results(self, x1, y1, z):
```

```
        "Returns results of simple equation given two values"
```

```
        value = return_results(x1,y1) #Calling other functions
```

```
        new_value = value*(z/4)
```

```
        self.data = new_value
```

V. Course Summary: Did you get your money's worth?

1. Learned to program functions/ classes
2. Learned a powerful, flexible programming language & some biology related tools
3. Able to read other folk's code
4. Have a much better idea of what programmers do all day
5. Will have a much easier time with other programming languages and upper-level courses