Class Inheritance

In [6]:
```
class Dog:
    _legs = 4
    def __init__(self, name):
        self.name = name

    def speak(self):
        print(self.name + ' says: Bark!')

    def getLegs(self):
        return self._legs


class Chihuahua(Dog):
    def speak(self):
        print(f'{self.name} says: Yap yap yap!')

    def wagTail(self):
        print('Vigorous wagging!')
```

In [7]:
```
dog = Chihuahua('Roxy')
dog.speak()
dog.wagTail()
```

```
Roxy says: Yap yap yap!
Vigorous wagging!
```

In [5]:
```
myDog = Dog('Rover')
myDog.speak()
```

```
Rover says: Bark!
```

Extending built-in classes

In [8]:
```
myList = list()
```

In [9]:
```
class UniqueList(list):
    def append(self, item):
        if item in self:
            return
        super().append(item)

uniqueList = UniqueList()
uniqueList.append(1)
uniqueList.append(1)
uniqueList.append(2)

print(uniqueList)
```

```
[1, 2]
```

In [10]:
```
class UniqueList(list):

    def __init__(self):
        super().__init__()
        self.someProperty = 'Unique List!'


    def append(self, item):
        if item in self:
            return
        super().append(item)

uniqueList = UniqueList()
uniqueList.append(1)
uniqueList.append(1)
uniqueList.append(2)

print(uniqueList.someProperty)
```

```
Unique List!
```

In [ ]: