

Notes Python

Classes

```
#!/usr/bin/python

class Employee:
    'Common base class for all employees'
    empCount = 0

    def __init__(self, name, salary):
        self.name = name
        self.salary = salary
        Employee.empCount += 1

    def displayCount(self):
        print "Total Employee %d" % Employee.empCount

    def displayEmployee(self):
        print "Name : ", self.name, ", Salary: ", self.salary

"This would create first object of Employee class"
emp1 = Employee("Zara", 2000)
"This would create second object of Employee class"
emp2 = Employee("Manni", 5000)
emp1.displayEmployee()
emp2.displayEmployee()
print "Total Employee %d" % Employee.empCount

// Built-In Class Attributes

print "Employee.__doc__:", Employee.__doc__
print "Employee.__name__:", Employee.__name__
print "Employee.__module__:", Employee.__module__
print "Employee.__bases__:", Employee.__bases__
print "Employee.__dict__:", Employee.__dict__
```

```

// Destroying Objects (Garbage Collection)
del emp1

// Class Inheritance
#!/usr/bin/python

class Parent:          # define parent class
    parentAttr = 100
    def __init__(self):
        print "Calling parent constructor"

    def parentMethod(self):
        print 'Calling parent method'

    def setAttr(self, attr):
        Parent.parentAttr = attr

    def getAttr(self):
        print "Parent attribute :", Parent.parentAttr

class Child(Parent): # define child class
    def __init__(self):
        print "Calling child constructor"

    def childMethod(self):
        print 'Calling child method'

c = Child()           # instance of child
c.childMethod()       # child calls its method
c.parentMethod()      # calls parent's method
c.setAttr(200)         # again call parent's method
c.getAttr()           # again call parent's method

// Overriding Methods
#!/usr/bin/python

class Parent:          # define parent class
    def myMethod(self):
        print 'Calling parent method'

class Child(Parent): # define child class

```

```
def myMethod(self):
    print 'Calling child method'

c = Child()          # instance of child
c.myMethod()         # child calls overridden method
```