

Inheritance : Transferring one class attributes or members to other class

```
class class1:
    x = 10
```

```
class class2:
    y = 20
```

```
print(class1.x)
print(class2.y)
print(class2.x)
```

```
10
20
```

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-1-cd36ac1af4ad> in <cell line: 9>()
      7 print(class1.x)
      8 print(class2.y)
----> 9 print(class2.x)
```

```
AttributeError: type object 'class2' has no attribute 'x'
```

SEARCH STACK OVERFLOW

```
class class1:
    x = 10
```

```
class class2(class1):
    y = 20
```

```
print(class1.x)
print(class2.y)
print(class2.x)
```

```
10
20
10
```

single inheritance

```
class class1:
    x = 10
```

```
class class2(class1):
    x = 20
```

```
print(class2.x)
```

```
20
```

```
class class1:
    x = 10
```

```
class class2(class1):
    pass
```

```
print(class1.x)
print(class2.x)
```

```
10
10
```

```
class class1:
    x = 'python'
    @classmethod
    def showdata(cls):
        print(cls.x)
class class2:
    x = 'django'
```

```
print(class1.x)
print(class2.x)
```

```
python
django
```

```
class1.showdata()
```

```
python
```

```
class2.showdata()
```

```
-----
AttributeError                                Traceback (most recent call last)
<ipython-input-11-39d37efe29bc> in <cell line: 1>()
----> 1 class2.showdata()
```

```
AttributeError: type object 'class2' has no attribute 'showdata'
```

SEARCH STACK OVERFLOW

```
class class1:
```

```
x = 'python'
@classmethod
def showdata(cls):
    print(cls.x)
class class2(class1):
    x = 'django'
```

```
print(class1.x)
print(class2.x)
```

```
python
django
```

```
class1.showdata()
```

```
python
```

```
class2.showdata()
```

```
django
```

```
class class1:
    def __init__(self):
        print('class : class1')
```

```
class class2(class1):
    pass
```

```
c11 = class1()
```

```
class : class1
```

```
c21 = class2()
```

```
class : class1
```

```
print(type(c11).__name__)
```

```
class1
```

```
print(type(c21).__name__)
```

```
class2
```

```
class class1:
    def __init__(self):
        print('class : class1')
```

```
class class2(class1):  
    def __init__(self):  
        print('class : class2')
```

```
c11 = class1()
```

```
class : class1
```

```
c21 = class2()
```

```
class : class2
```

```
print(type(c11).__name__)
```

```
class1
```

```
print(type(c21).__name__)
```

```
class2
```

```
class mobile_v1:  
    os = 'symbion'  
    touch = 'not supported'  
    keypad = 'available'  
    internet = 'not supported'  
    radio = 'available'  
    camera = 'not supported'  
    @classmethod  
    def showdata(cls):  
        print('Operating System :',cls.os)  
        print('Touch screen :',cls.touch)  
        print('Keypad :',cls.keypad)  
        print('Internet :',cls.internet)  
        print('Radio :',cls.radio)  
        print('Camera :',cls.camera)
```

```
class mobile_v2(mobile_v1):  
    os = 'android'  
    touch = 'available'  
    keypad = 'not supported'  
    internet = 'available'  
    camera = 'available'
```

```
mobile_v1.showdata()
```

```
Operating System : symbion  
Touch screen : not supported  
Keypad : available
```

Internet : not supported
Radio : available
Camera : not supported

`mobile_v2.showdata()`

Operating System : android
Touch screen : available
Keypad : not supported
Internet : available
Radio : available
Camera : available

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