

In [12]:

```
1 class f:  
2     pass  
3 class e:  
4     pass  
5 class d:  
6     pass  
7 class c(f,d):  
8     pass  
9 class b(d,e):  
10    pass  
11 class a(c,b):  
12    pass  
13 a.mro()
```

Out[12]:

```
[__main__.a,  
 __main__.c,  
 __main__.f,  
 __main__.b,  
 __main__.d,  
 __main__.e,  
 object]
```

In [10]:

```
1 class a:  
2     pass  
3 class b:  
4     pass  
5 class c(a,b):  
6     pass  
7 class d(b,a):  
8     pass  
9 class e(c,d):  
10    pass
```

---

**TypeError**

ent call last)

&lt;ipython-input-10-523566d08bf7&gt; in &lt;module&gt;

```
7 class d(b,a):  
8     pass  
----> 9 class e(c,d):  
10    pass
```

Traceback (most rec

**TypeError:** Cannot create a consistent method resolution order (MRO) for bases a, b

In [16]:

```
1 class A:  
2     pass  
3 class B:  
4     pass  
5 class C:  
6     pass  
7 class X(A,B):  
8     pass  
9 class Y(C,A,B):  
10    pass  
11 class Z(A):  
12    pass  
13 class P(Z,Y,X):  
14    pass  
15 P.mro()
```

Out[16]:

```
[__main__.P,  
 __main__.Z,  
 __main__.Y,  
 __main__.C,  
 __main__.X,  
 __main__.A,  
 __main__.B,  
 object]
```

- pzyxacb
- xab
- ycab
- za
- p+za+ycab+xab
- pzyc+a+ab+xab
- pzycx+a+ab+ab
- pzycxabo

In [18]:

```

1 class P:
2     pass
3 class Q:
4     pass
5 class R(P,Q):
6     pass
7 class S(Q):
8     pass
9 class T(S,R):
10    pass
11 a=T()
12 T.__mro__

```

Out[18]: (`__main__.T, __main__.S, __main__.R, __main__.P, __main__.Q, object`)

- r pq
- s q
- t sr
- t+s q+r pq
- t s+q+r pq
- t sr+q+p q
- t sr p+q+q
- t sr p q o

In [21]:

```

1 class A: pass
2 class B: pass
3 class C: pass
4 class D:pass
5 class E:pass
6 class K1(C,A,B): pass
7 class K3(A,D): pass
8 class K2(B,D,E): pass
9 class Z( K1,K3,K2): pass

```

- k1cab
- k3ad
- k2bde
- z+k1cab+k3ad+k2bde
- zk1ck3+ab+ad+k2bde
- zk1ck3ak2bdeo

In [22]: 1 Z.mro()

Out[22]: [`__main__.Z,`  
`__main__.K1,`  
`__main__.C,`  
`__main__.K3,`  
`__main__.A,`  
`__main__.K2,`  
`__main__.B,`  
`__main__.D,`  
`__main__.E,`  
`object]`

## Comaparison

`__eq__` -> ==  
`__lt__` -> <  
`__gt__` -> >

In [23]: 1 `class comp:`  
2     `def __init__(self,d):`  
3         `self.d=d`  
4     `def __eq__(self,other):`  
5         `return self.d == other.d`  
6     `def __lt__(self,other):`  
7         `return self.d > other.d`  
8  
9     `def __gt__(self,other):`  
10         `return self.d < other.d`  
11  
12

In [27]: 1 `a=comp(10)`  
2     `b=comp(20)`  
3     `print(a == b)`  
4     `print(a > b)`  
5     `print(a < b)`

False  
True  
False

In [ ]: 1

