

```
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

Traceback (most rec

ent call last)

<ipython-input-10-523566d08bf7> in <module>

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

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`)

- `rpq`
- `sq`
- `tsr`
- `t+sq+rpq`
- `ts+q+rpq`
- `tsr+q+pq`
- `tsrp+q+q`
- `tsrpqo`

```
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
```

