

memory organization1

July 8, 2017

```
In [1]: s1="python"
        s2="program"
        s3=s1
        s4="python"
        print s1,s3,s4
        print id(s1),id(s3),id(s4)
```

```
python python python
139936187280192 139936187280192 139936187280192
```

```
In [2]: s1="python "
        s2="program"
        s3=s1
        s4="python "
        print s1,s3,s4
        print id(s1),id(s3),id(s4)
```

```
python python python
139935957606832 139935957606832 139935957606544
```

```
In [3]: l1=[1,2,3,4]
        l2=[5,6,7,8]
        l3=l1
        l4=[1,2,3,4]
        print id(l1),id(l3)
        print id(l4)
```

```
139936127215376 139936127215376
139936127215088
```

```
In [4]: a=10
        a=20
```

```
In [5]: print a
```

20

```
In [6]: a=10
        a=a+20
        print a
```

30

```
In [8]: l=[1,2,3,4]
        print id(l),l
        l.append(10)
        print id(l),l
```

```
139935957427552 [1, 2, 3, 4]
139935957427552 [1, 2, 3, 4, 10]
```

```
In [9]: l1=[1,2,3,4]
        l2=l1
        l3=[1,2,3,4]
        l1.append(10)
        print l1
        print l2
        print l3
```

```
[1, 2, 3, 4, 10]
[1, 2, 3, 4, 10]
[1, 2, 3, 4]
```

```
In [10]: l1=[1,2,3,4]
         l2=l1
         l3=[1,2,3,4]
         l1=[1,2,3,4]
         l1.append(10)
         print l1
         print l2
         print l3
```

```
[1, 2, 3, 4, 10]
[1, 2, 3, 4]
[1, 2, 3, 4]
```

```
In [11]: a=10
         a=a+20
         s1="python"
         s2=s1.replace('p','z')
         print s2
         print s1
```

zython
python

```
In [12]: s1="python"  
         s2=s1.replace('p','z')  
         print s2  
         print s1
```

zython
python

```
In [14]: s1="python"  
         s2=s1  
         s3=s1.replace('p','z')  
         print s1  
         print s2  
         print s3
```

python
python
zython

```
In [ ]:
```