

Python Talk 3



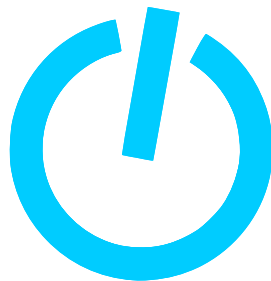
复习

- 回答以下问题

- 如何创建一个元素 tuple ?
- tuple 和 list 有什么区别?
- 如何合并 dict ?
- 如何得到 '2468' ?
 - 通过 '1234567890'

- 答案

- (1,)
- list 可变
- update()
- [1: 8: 2]



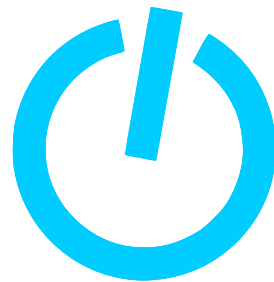
循环和判断

- 循环

- for
- while

- 判断

- if
 - elif
 - else



while

- 语法

while Expression :

Code

Code

Code

- 对比 c 语言

while (Expression)

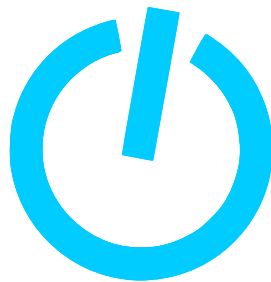
{

Code;

Code;

}

Code;



while 例子

- 问题

- 求出 3~35 的奇数和

```
i = 3
```

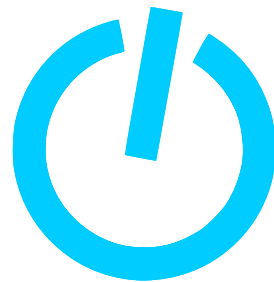
```
s = 0
```

```
while i <= 35 :
```

```
    s += i
```

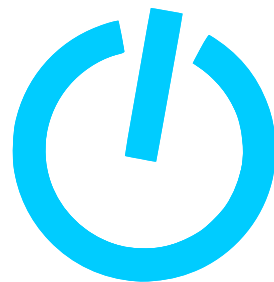
```
    i += 2
```

```
print(s)
```



while 练习

- 计算以下数列的和
 - 1, 3, 5, 7, 9, 11, ... , 95, 97, 99
 - 1, 2, 4, 8, 16, ... , 256, 512, 1024
- 用 while 打印这个字符串
 - '1,3,5,7,9,11,13,15,17,19,21,'



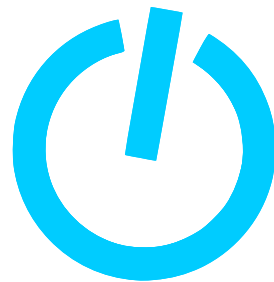
for

- 语法

```
for i in Object :  
    Code  
    Code  
Code
```

- 对比 c 语言

```
for (int i = 0; i <  
N; i += 1)  
{  
    Code;  
    Code;  
}  
Code;
```



for 举例

- 问题

- 计算以下元组的元素和

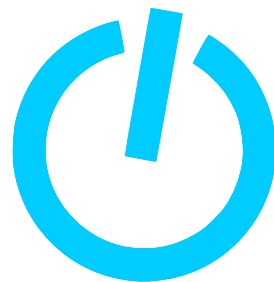
- [3, 1, 4, 1, 5, 9, 2, 6, 5]

```
s = 0
```

```
for i in [3, 1, 4,  
1, 5, 9, 2, 6, 5] :
```

```
    s += i
```

```
print(s)
```



sum 函数

- 语法

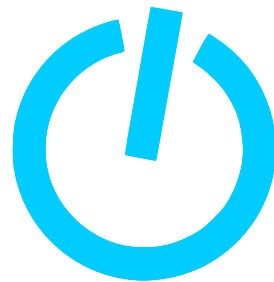
- **sum**(ListOfNum)

- 举例

- **sum**([1, 3, 5])

- 对比

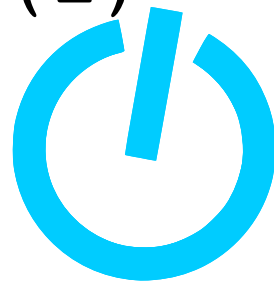
```
s = 0
l = [1, 3, 5]
for i in l:
    s += i
s
```



range 函数

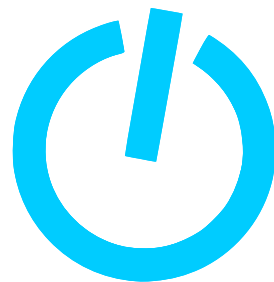
- 尝试以下代码

- **for** i **in** range(10): print(i)
- **for** i **in** range(3, 10): print(i)
- **for** i **in** range(3, 10, 2): print(i)



for 练习

- 计算以下数列的和
 - 1, 2, 3, 4, 5, 6, 7, ... , 1365, 1366
 - 11, 13, 15, 17, 19, ... , 95, 97, 99
- 用 while 打印这个字符串
 - '1,3,5,7,9,11,13,15,17,19,21,'
 - 提示：使用字符串加法以及 `str(i)`



感谢参加此次活动

