Cheetsheet:

- Sort lists by keys:

```python
student_tuples = [('john', 'A', 15),('jane', 'B', 12), ('dave', 'B', 10),]
x = sorted(student_tuples, key=lambda student: student[2],reverse = True)
```

- Sort dictionary by keys

```python
y = {k: v for k, v in sorted(x.items(), key=lambda item: item[1])}
```

- 步长：

```python
d = [x for x in range(10)]
e = d[:8:2]
```

- 字符串格式化

```python
'Print {1} {0} {1}'.format("hello", "world")

'Print world hello world'
```

- 将字符转为列表

```python
sorted(str(123123))

['1', '1', '2', '2', '3', '3']
```

- 将**sorted**和**set**结合起来使用以得到一个**由序列中的唯一元素构成的有序列表**

```python
sorted(str(123123))

['1', '1', '2', '2', '3', '3']
```

- zip：**同时迭代多个序列**

```
seq1 = ['chao', 'qing', 'wq']
seq2 = ['qin', 'wang', 'qc']
for i , (a,b) in enumerate(zip(seq1, seq2)):
  print('%d: %s %s' % (i, a, b))


0: chao qin
1: qing wang
2: wq qc
```

- 按逆序迭代序列中的元素

```
[x for x in reversed([1, 2, 5, 3, -1])]


[-1, 3, 5, 2, 1]
```

- Convert list to str

```
' '.join([str(elem) for elem in s])
```

- 判断是否为回文

```
def test(input_text):
    if len(list(input_text)) <= 1:
        return True
    else:
        if list(input_text)[0] != list(input_text)[-1]:
            return False
        else:
            return test(' '.join([str(elem) for elem in list(['a', 's',
'd'])[1:-1]]))
```

- 逆序打印

```
def test(input_text):
    if input_text == []:
        return input_text
    else:
        return input_text[-1:] + test(input_text[:-1])
```