



# 111-1基礎程式設計(7)

亞大資工系

# 課程大綱

- W1-Python簡介及程式工具
- W2-變數和運算
- W3-迴圈和格式化輸出
- W4-判斷式和容器
- W5-字串處理和輸出入
- W6-M1測驗
- W07-字典容器
- W08-檔案處理
- W09-函數
- W10-進階流程控制
- W11-進階運算和生成器
- W12-M2測驗
- W13-進階函數
- W14-類別
- W15-進階類別
- W16-模組和套件
- W17-進階設計
- W18-M3測驗



# 本週主題:字典容器

- Week8-字典容器
  - Topic 1(主題1)-字典的宣告
  - Topic 2(主題2)-字典的初始化(Dict Comprehensions, PEP 274)
  - Topic 3(主題3)-字典項目的增加
  - Topic 4(主題4)-字典項目的移除
  - Topic 5(主題5)-字典項目的使用
  - Topic 6(主題6)-字典的迴圈
  - Topic 7(主題7)-字典轉串列
  - Topic 8(主題8)-複習格式化輸出



# Topic 1-字典的宣告

```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
print(thisdict)
```



# Topic 2-字典的初始化

```
days = ["Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"]  
temp_C = [30.5, 32.6, 31.8, 33.4, 29.8, 30.2, 29.9]  
weekly_temp = {day:temp for (day,temp) in zip(days,temp_C)}  
  
print(weekly_temp)
```



# Topic 3:字典項目的增加

```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
thisdict["color"] = "red"  
print(thisdict)
```

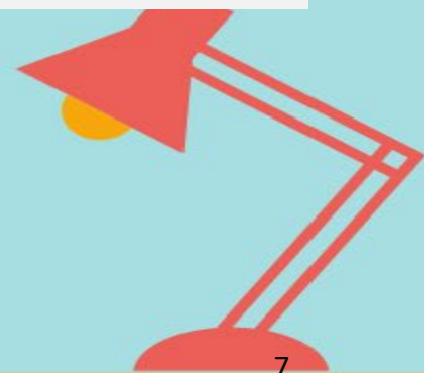


# Topic 4-字典項目的移除

```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
thisdict.pop("model")  
del thisdict["year"]  
print(thisdict)
```

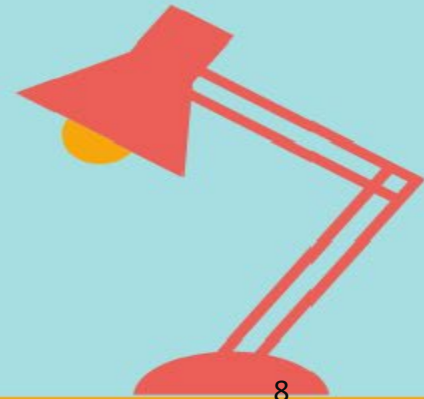
```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
  
thisdict.clear()  
print(thisdict)
```

```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
  
del thisdict  
print(thisdict)
```



# Topic 5-字典項目的使用

```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
x = thisdict["model"]  
  
car["year"] = 1999
```





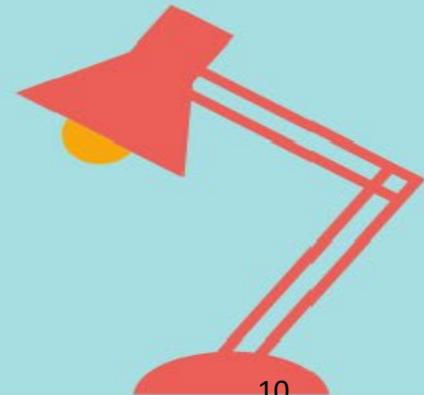
# Topic 6: 字典的迴圈

```
thisdict = {  
    "brand": "Ford",  
    "model": "Mustang",  
    "year": 1964  
}  
  
for x in thisdict.keys():  
    print(x)  
  
for x in thisdict.values():  
    print(x)  
  
for x, y in thisdict.items():  
    print(x, y)
```



# Topic 7(主題7)-字典轉串列

```
[(k,v) for k,v in dict.items()]
```



# Topic 8-複習格式化輸出

說明：

**%-formatting** 格式化列印

```
print('Art: %5d, Price per Unit: %8.2f' % (435, 59.058))
```

**str-format ( Python 2.6+ )** 格式化列印

```
print("Art: {0:5d}, Price per Unit: {1:8.2f}".format(435, 59.058))
```

**f-string ( Python 3.6+ )** 格式化列印

```
A = 435; B = 59.058
```

```
print(f"Art:{A:5d}, Price per Unit: {B:8.2f}")
```



Thanks!

Q&A

