jupyter快捷鍵 與 特別指令

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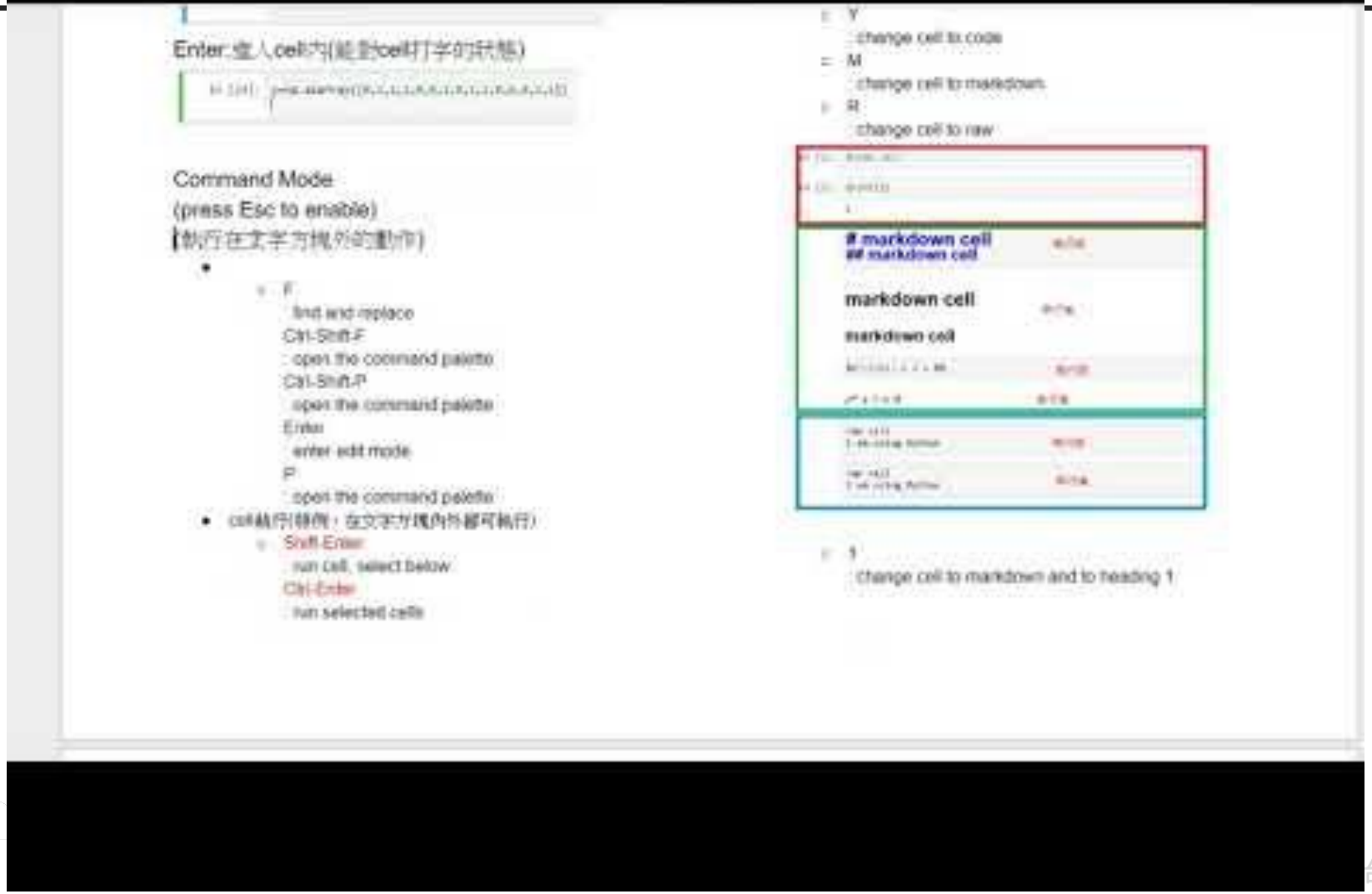
「版權聲明頁」

有標紅色的是比較常用的快捷鍵


Enter:進入cell內(能對cell打字的狀態)
Command Mode
(press Esc to enable)
F
find and replace
Ctrl-Shift-F
open the command palette
Ctrl-Shift-P
open the command palette
Enter
enter edit mode
P
open the command palette
Shift-Enter
run cell, select below
Ctrl-Enter
run selected cells
Y
change cell to code
M
change cell to markdown
R
change cell to raw
markdown cell
markdown cell
markdown cell
markdown cell
1
change cell to markdown and to heading 1

Esc and Enter

Esc：跳出cell外(無法對cell打字的狀態)(進入Command Mode)

```
In [24]: y=np.asarray([0,1,1,1,0,0,1,0,1,1,0,0,0,1,1])
```

Enter:進入cell內(能對cell打字的狀態)(進入Edit Mode)

```
In [24]: y=np.asarray([0,1,1,1,0,0,1,0,1,1,0,0,0,1,1])
```

Command Mode

```
In [24]: y=np.asarray([0,1,1,1,0,0,1,0,1,1,0,0,0,1,1])
```

Command Mode

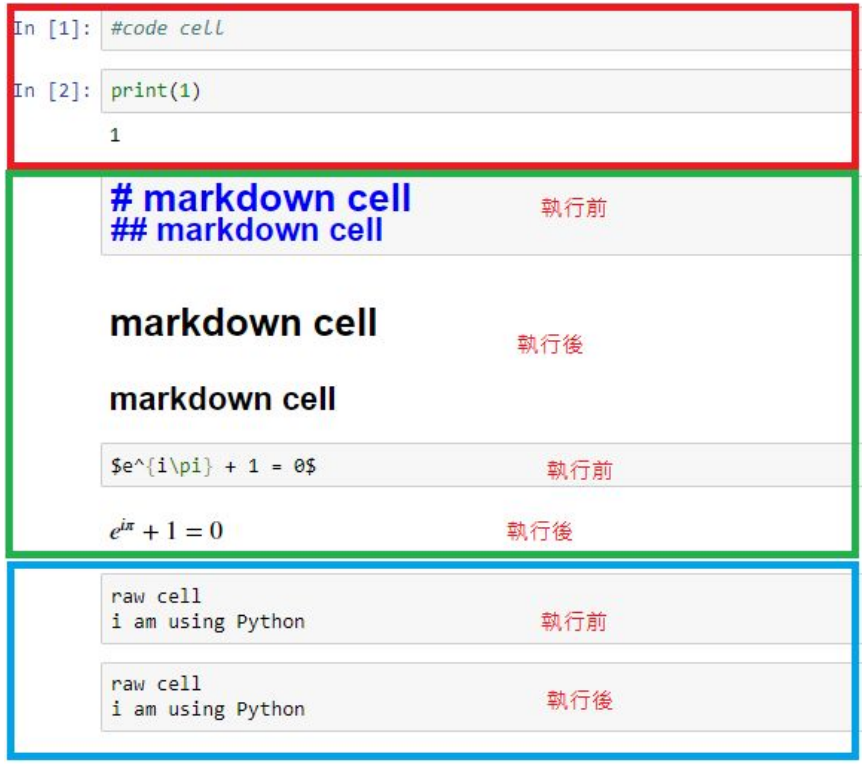
- cell執行(特例，在文字方塊內外都可執行)
  - Shift-Enter
    : run cell, select below
    Ctrl-Enter
    : run selected cells
    Alt-Enter
    : run cell and insert below

Command Mode

- cell的新增、移除、合併
  - A
    : insert cell above
    B
    : insert cell below
    X
    : cut selected cells
    C
    : copy selected cells
  - Shift-V
    : paste cells above
    V
    : paste cells below
    Z
    : undo cell deletion
    D,D
    : delete selected cells
    Shift-M
    : merge selected cells, or current cell with cell below if only one cell is selected

Command Mode

- 改變cell功能(code、文字、或標註)
  - Y
    : change cell to code
  - M
    : change cell to markdown
  - R
    : change cell to raw



Command Mode

- 其他
  - Ctrl-S
    : Save and Checkpoint
    S
    : Save and Checkpoint
    L
    : toggle line numbers
    O
    : toggle output of selected cells
    Shift-O
    : toggle output scrolling of selected cells
    H
    : show keyboard shortcuts
  - I,I
    : interrupt the kernel
  - 0,0
    : restart the kernel (with dialog)
  - Esc
    : close the pager
  - Q
    : close the pager
  - Shift-L
    : toggles line numbers in all cells, and persist the setting
  - Shift-Space
    : scroll notebook up
  - Space
    : scroll notebook down

Command Mode

- 其他
  - K
    : select cell above
    Up
    : select cell above
    Down
    : select cell below
    J
    : select cell below
  - Shift-K
    : extend selected cells above
    Shift-Up
    : extend selected cells above
    Shift-Down
    : extend selected cells below
  - Shift-J
    : extend selected cells below
  - F
    : find and replace
    Ctrl-Shift-F
    : open the command palette
    Ctrl-Shift-P
    : open the command palette
    Enter
    : enter edit mode
    P
    : open the command palette

Edit Mode

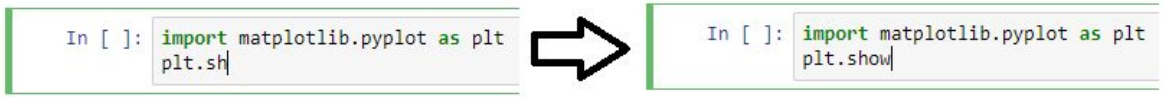
```
In [24]: y=np.asarray([0,1,1,1,0,0,1,0,1,1,0,0,0,1,1])
```

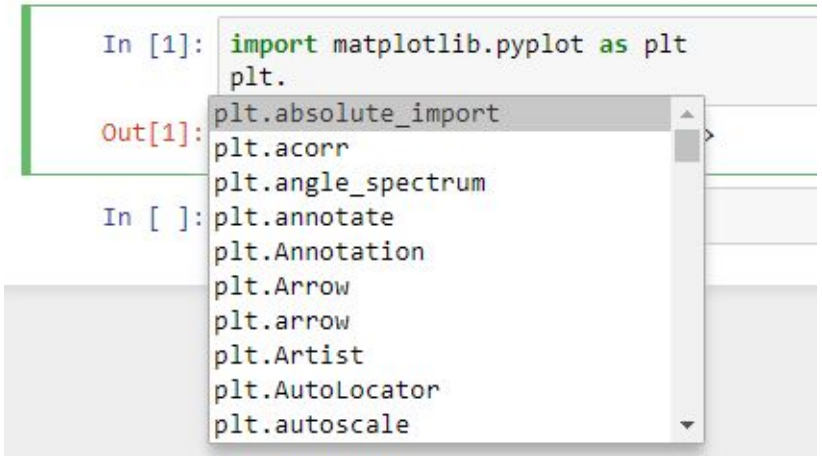
Edit Mode

- function提示與說明文件
  - Shift-Tab
    : tooltip
  - Shift-Tab*2
    : tooltip+parameters

Edit Mode

- 自動輸出補上(或提供輸入選項)
  - Tab
    : code completion or indent





Edit Mode

- function提示與說明文件
  - Shift-Tab
    : tooltip
  - Shift-Tab*2
    : tooltip+parameters

```
In [1]: import matplotlib.pyplot as plt
        plt.show

Out[1]: Signature: plt.show(*args, **kw)
        Docstring:
        Display a figure.
        When running in ipython with its pylab mode, display all

In [ ]:
```

Edit Mode

- 剪下、複製、貼上
  - Ctrl-X
  - Ctrl-C
  - Ctrl-V

Edit Mode

- 還原與取消還原
  - Ctrl-Z
  - : undo
  - Ctrl-U
  - : undo selection(和Ctrl-Z類似，不同的地方在於將"選取"也算成一次動作)
  - Ctrl-Y/ Ctrl-Shift-Z
  - : redo
  - Alt-U
  - : redo selection(和Ctrl-Y/ Ctrl-Shift-Z類似，不同的地方在於將"選取"也算成一次動作)

```
w3_BN = tf.Variable(w3_initial)
b3_BN = tf.Variable(tf.zeros([10]))
y_BN  = tf.nn.softmax(tf.matmul(l2_BN,w3_BN)+b3_BN)
# Loss, optimizer and predictions
cross_entropy = -tf.reduce_sum(y_*tf.log(y))
cross_entropy_BN = -tf.reduce_sum(y_*tf.log(y_BN))

correct_prediction = tf.equal(tf.arg_max(y,1),tf.arg_max(y_,1))
accuracy = tf.reduce_mean(tf.cast(correct_prediction,tf.float32))
correct_prediction_BN = tf.equal(tf.arg_max(y_BN,1),tf.arg_max(y_,1))
accuracy_BN = tf.reduce_mean(tf.cast(correct_prediction_BN,tf.float32))
# Training the network
zs, BNs, acc, acc_BN = [], [], [], []

sess = tf.InteractiveSession()
sess.run(tf.global_variables_initializer())
for i in tqdm.tqdm(range(40000)):
```

Edit Mode

- 游標動作
  - Ctrl-Home
    : go to cell start
  - Ctrl-Up(not work when i tried)
    : go to cell start
  - Ctrl-End
    : go to cell end
  - Ctrl-Down(not work when i tried)
    : go to cell end
  - Ctrl-Left
    : go one word left(not a Character)
  - Ctrl-Right
    : go one word right(not a Character)
  - Down
    : move cursor down
  - Up
    : move cursor up
- 其他
  - Ctrl-]
    : indent
  - Ctrl-[
    : dedent
  - Ctrl-A
    : select all(cell內全選)
  - Ctrl-/
    : comment
  - Ctrl-D
    : delete whole line
  - Insert
    : toggle overwrite flag
  - Ctrl-Backspace
    : delete word before
  - Ctrl-Delete
    : delete word after
  - Ctrl-M
    : enter command mode
    Ctrl-Shift-F
    : open the command palette
  - Ctrl-Shift-P
    : open the command palette
  - Esc
    : enter command mode
  - Ctrl-Shift-Minus
    : split cell at cursor
  - Ctrl-S
    : Save and Checkpoint

Jupyter notebook 魔術指令

- 以 ! 開頭，可以直接輸入 terminal 的指令
  !nvidia-smi
  !ls
  !rm
  !pip install ...

Jupyter notebook 魔術指令

- Jupyter 中有許多特殊指令，都是以 % 開頭
  %cd: 改變路徑
  %save: 將 cell 儲存為 .py
  %run xxx.py: 執行 xxx.py 檔
  %timeit: 計算該 cell 執行之時間
  %matplotlib inline: 將繪製的圖直接顯示在 notebook 上
  %matplotlib notebook

Jupyter notebook 魔術指令

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  !ls
  !rm
  !pip install ...

想知道 function 的說明文件?

- method1:Shift-Tab*2
- method2:run ?+function

```
In [4]:  1 ??np.sqrt
```

```
Call signature:  np.sqrt(*args, **kwargs)
Type:            ufunc
String form:     <ufunc 'sqrt'>
File:            c:\users\jimmy\anaconda3\lib\site-packages\numpy\__init__.py
Class docstring:
Functions that operate element by element on whole arrays.

To see the documentation for a specific ufunc, use np.info().  For
example, np.info(np.sin).  Because ufuncs are written in C
(for speed) and linked into Python with NumPy's ufunc facility,
Python's help() function finds this page whenever help() is called
on a ufunc.

A detailed explanation of ufuncs can be found in the "ufuncs.rst"
file in the NumPy reference guide.
```