Intro to jupyter notebook

How to run markdown or code cell?

ctrl +Enter ---> Will run the cell and cursor will be in same cell Alt + Enter --> Will run the cell and create an empty cell below Shift + Enter --> Run the cell and cursor will be in the next cell. if next cell is not there it will create a cell

new markdown cell

This is a sepearte paragraph

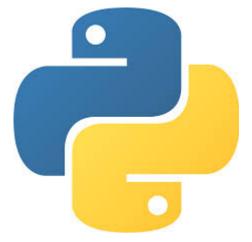
Cell type conversion

- from markdown to code 'Esc y'
- · from code to markdown 'Esc m'

other topics

- 1. ordered list
- 2. insert an image
- 3. insert hyperlink

Python



markdown cheat sheet (https://www.markdownguide.org/cheat-sheet/)

Python Basic Mathematical Operators

```
In [3]:
           1 print('Python Basic Mathematical Operators')
           2 print(34 + 2)
           3 print(44 - 7)
         Python Basic Mathematical Operators
         36
         37
 In [4]:
           1 print(77/2)
           2 print(77//2)
           3 print(77 % 3)
         38.5
         38
         2
 In [5]:
           1 a = 77
           2 | b = 4
           3 print(a,b)
         77 4
 In [6]:
           1 print(a+b)
           2 print(a/b)
           3 print(a//b)
           4 print(a%b)
         81
         19.25
         19
         1
           1 s ="hello"
 In [7]:
             s * b
 Out[7]: 'hellohellohello'
In [8]:
           1 s1 = "world"
           2 print(s+s1)
           3 print(s +" " +s1)
         helloworld
         hello world
 In [9]:
          1 print(a,b,s,s1)
         77 4 hello world
In [10]:
           1 print(type(a),type(b),type(s),type(s1))
         <class 'int'> <class 'int'> <class 'str'> <class 'str'>
```

```
In [11]:
           1 a = "python"
           2 print(a,type(a))
         python <class 'str'>
In [12]:
           1 print(b,type(b))
           2 b = True
           3 print(b,type(b))
         4 <class 'int'>
         True <class 'bool'>
In [13]:
           1 | i = "27"
           2 print(i,type(i))
         27 <class 'str'>
          1 str(34),int("78"),float('56.5')
In [14]:
Out[14]: ('34', 78, 56.5)
In [15]:
           1 i= int(i)
           2 print(i,type(i))
         27 <class 'int'>
             int("hello")
In [16]:
         ValueError
                                                    Traceback (most recent call last)
         <ipython-input-16-a6f1987f81d0> in <module>()
         ----> 1 int("hello")
         ValueError: invalid literal for int() with base 10: 'hello'
           1 float("568.78")
In [17]:
Out[17]: 568.78
In [18]:
              b1 = True
           2 b2 = True
           3 | print(b1+b2)
             print(b1-b2)
              print(b1/b2)
             print(b1%b2)
         2
         0
         1.0
```

```
In [19]:
           1 True + 57
Out[19]: 58
In [20]:
           1 print("hello")
           2 print("everyone")
           3 print("thirderror")
         hello
         everyone
         thirderror
In [21]:
           1 5 ** 3
Out[21]: 125
In [22]:
           1 5 ^ 3 # 101^011=110 bitwise xor operation
Out[22]: 6
In [23]:
           1 s3 = 'single'
           2 s4 = "double"
           3 s5 = '''triple single quote'''
           4 s6 = """triple double quote"""
           5 print(s3,s4,s5,s6,sep =',')
           6 print(type(s3),type(s4),type(s5),type(s6))
         single, double, triple single quote, triple double quote
         <class 'str'> <class 'str'> <class 'str'> <class 'str'>
           1 | s7 = 'I don\'t want to learn python'
In [24]:
           2 s8 = "I don't want to learn python"
           3 print(s7)
           4 print(s8)
         I don't want to learn python
         I don't want to learn python
In [25]:
           1 | s9 = '"python" is a popular language'
           2 s10 ="\"python\" is a popular language"
           3 print(s9)
           4 print(s10)
         "python" is a popular language
         "python" is a popular language
```

```
In [26]:
           1 | s11 ='''python is popular
           2 so we are learning python'''
           3 print(s11)
              s11
         python is popular
         so we are learning python
Out[26]: 'python is popular\nso we are learning python'
In [34]:
           1 ivalue = input("Enter a number")
           2 print(ivalue, type(ivalue))
           3 ivalue = int(ivalue)
              print(ivalue, type(ivalue))
         Enter a number78
         78 <class 'str'>
         78 <class 'int'>
In [35]:
           1 ivalue = int(input("Enter a number"))
           2 print(ivalue, type(ivalue))
         Enter a number78
         78 <class 'int'>
In [31]:
           1 svalue = input("Enter a string")
           2 print(svalue, type(svalue))
         Enter a stringpython
         python <class 'str'>
In [36]:
           1 | fvalue = float(input("Enter a Floating point number"))
           2 print(fvalue, type(fvalue))
         Enter a Floating point number 78.89
         78.89 <class 'float'>
         Read the first name, last name of person and print them in reverse order
         Example
         First Name: Suman
         Last Name: Roy
         O/p: Roy Suman
In [38]:
           1 firstName = input("Enter First Name: ")
           2 lastName = input('Enter last Name: ')
           3 print(lastName, firstName)
           4 print(lastName+' '+firstName)
         Enter First Name: Suman
         Enter last Name: Roy
         Roy Suman
         Roy Suman
```

Read a name and a number n. Repeat the name n times.

```
Example
name : Python
n : 3
o/p :Python Python Python
```