

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 \(https://www.markdownguide.org/cheat-sheet/\)](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
```

```
In [7]: 1 s ="hello"
        2 s * b
```

```
Out[7]: 'hellohellohellohello'
```

```
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'>
```

```
In [14]: 1 str(34),int("78"),float('56.5')
```

```
Out[14]: ('34', 78, 56.5)
```

```
In [15]: 1 i= int(i)
         2 print(i,type(i))
```

```
27 <class 'int'>
```

```
In [16]: 1 int("hello")
```

```
-----
ValueError                                Traceback (most recent call last)
<ipython-input-16-a6f1987f81d0> in <module>()
----> 1 int("hello")
```

```
ValueError: invalid literal for int() with base 10: 'hello'
```

```
In [17]: 1 float("568.78")
```

```
Out[17]: 568.78
```

```
In [18]: 1 b1 = True
         2 b2 = True
         3 print(b1+b2)
         4 print(b1-b2)
         5 print(b1/b2)
         6 print(b1%b2)
```

```
2
0
1.0
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'>

In [24]: 1 s7 = 'I don\'t want to learn python'
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)
4         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)
4         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 number78.89
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

In [40]:

```
1 name = input("Enter a name")
2 n = int(input("enter number"))
3 print((name+' ')*n)
```

Enter a namePython

enter number3

Python Python Python

In []:

1