Markdown Basics

- **Bold**
- *Itallic*
- ***IB***
- Normal Text
  - Sublist1
  - Sublist2

1. Ordered list element1
2. Ordered list element2

JupyterLogo (JupyterLogo.png)

python Basics

Python Version 3.7

-scripting

In [27]:
```
#Python comments

print("Good Afternoon !",end=" ") # Basic output
print ("Hello python")
```

```
Good Afternoon ! Hello python
```

Data types

1. int
2. float
3. string
4. double

Assignment

In [30]:
```
n1=123456  # Single Variable Assignment

n2=n3=n4=n1  # Multi Variable Assignment of the

a,b,c,=123,234,345 #Multi variable

print(a,b,c)
```

```
123 234 345
```

In [ ]:
```

```

Arithmetic Operation

- +
- -
- X
- /
- %

In [38]:
```
n1%11

n3=n2**123456

type(n3)
len(str(n3))

atoms = 10 ** 82
len(str(atoms))
type(str(atoms))

12232 * 9
```

Out[38]:
```
110088
```

Conditionals

In [45]:
```
if atoms < 10 ** 9:
      print("TRUE")

else:
    print("FALSE")
```

```
FALSE
```

In [36]:
```
type(a)
s1="python"
type(s1)

f1=12.35
type(f1)

int(f1)
float(f1)

float(str(int(f1)))

122321 ** 9
```

Out[36]: 6130687873308026945890176790042303730066739281

In [5]:
```
#check if a number is Even
n=123
if n%2==0:
     print ("Even")
else:
    print("odd")
```

odd

In [ ]:
```
# find the greatest of 3 num

n1=int(input("Enter the first number"))
n2=int(input("Enter the second number"))
n3=int(input("Enter the third number"))
if n1>n2 and n1>n3:
    print(n1,"is the greatest")
elif n2>n3:
     print(n2, "is the greatest")
else:
    print(n3,"is the greatest")
```

In [2]:
```
## Check if a year is leap year

n1=int(input("Enter the year"))
if n1%4==0:
    print("leap year")
elif n1%400==0 and n1%100!=0:
     print("leap year")
else:
    print ("not leap year")
```

```
Enter the year2019
not leap year
```

In [6]:
```
# check if a number exists in a given range(include)

n1=int(input("Enter the num"))
lb=123
ub=143
if 123<= n1 >=143:
    print("It is in range")
else:
    print("it is not in range")
```

```
Enter the num1145
It is in range
```

In [1]:
```
#Calculte the number of digits in a number
n1=13242342
print(len(n1))
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-1-95acc26cbe22> in <module>
      1 #Calculte the number of digits in a number
      2 n1=13242342
----> 3 print(len(n1))

TypeError: object of type 'int' has no len()
```

In [ ]:
```
#check if a number is a multiple  of 10
n1=int(input("Enter the number"))
if n1%10==0:
    print(n1,"is multiple")
else:
    print(n1,"not a multiple")
```

In [2]:
```
# check if given atring
if
```

In [8]:
```
#calculate the square root of a number without
n1=123
n1 ** 0.5
```

Out[8]:
```
11.090536506409418
```

In [2]:
```
#calculate the number of nano seconds in a given year(considering leap year logic)
n=2019
if n%4==0 or n%400==0 and n%100!==0:
    print (366 * 24 * 60 * 60 * (10**9) )
else:
    print (365 * 24 * 60 * 60 * (10**9) )
```

```
  File "<ipython-input-2-70493fc141df>", line 3
    if n%4==0 or n%400==0 and n%100!==0:
                                     ^
SyntaxError: invalid syntax
```

In [13]:
```
# check a given number is factor of the number or not
n1=int(input("Enter the number"))
if 1000%n1==0:
    print(n1,"is a factor of 1000")
else:
    print(n1,"is not a factor of 1000")
```

```
Enter the number10
10 is a factor of 1000
```

In [ ]:
```

```