

Markdown Basics

Italic

bold

Italic Bold

- normal text

unordered list

- sublist 1
- sublist 2

ordered list

1. list 1
2. list 2

adding links

I get 10 times more traffic from [Google] [1 \(http://google.com/\)](http://google.com/) than from [Yahoo] [2 \(http://search.yahoo.com/\)](http://search.yahoo.com/) or [MSN] [3 \(http://search.msn.com/\)](http://search.msn.com/).

```
printf("Hello Markdown")
```

<https://google.com> (<https://google.com>)

<https://gmail.com> (<https://gmail.com>)

image adding

[Jupyter Logo \(jp.png\)](#)

Type *Markdown* and LaTeX: α^2

python basics

Python version 3.7

-scripting -object oriented -functional

```
In [1]: 1 #python comments
        2
        3 print("Good Afternoon", "!", end="||")#Basic output
        4 print("hai this is srikanya")
        5
```

Good Afternoon !||hai this is srikanya

```
In [ ]: 1
```

```
In [ ]: 1
```

Assignments

```
In [2]: 1 n1=123456 #single variable assignment
        2
        3 n2=n3=n4=n1 #multi variable assignment of the same value
        4
        5 print(n1,n2,n3,n4)
        6
        7 n2
        8 a,b,c=123,234,345 #multi variable assignment with different values
        9
        10 print(a,b,c)
        11
        12
        13
```

123456 123456 123456 123456
123 234 345

Data Types & Type conversions

- int
- float
- string

```
In [3]: 1 type(a)
        2 s1="python"
        3 type(s1)
        4
        5 f1=12.34
        6 type(f1)
        7
        8 float(str(int(f1)))
```

Out[3]: 12.0

Arithmetic Operations

- +
- -
- *
- /
- ^
- %

```
In [4]: 1 n1 % 11
        2
        3 n3=n2 ** 123456
        4
        5 type(n3)
        6
        7 len(str(n3))
        8
        9 atoms = 10 ** 82
       10
       11 len(str(atoms))
       12
       13 type(str(atoms))
       14
       15 len(str(atoms))
       16
       17 122321 ** 9
       18
```

Out[4]: 6130687873308026945890176790042303730066739281

```
In [ ]: 1
```

Conditionals

```
In [ ]: 1 if atoms < 10 ** 96:
        2     print("TRUE")
        3 else:
        4     print("FALSE")
```

TRUE

```
In [ ]: 1 #check if a number is even
        2
        3 n=123
        4 if n % 2==0:
        5     print("EVEN")
        6 else:
        7     print("odd")
        8
```

odd

check the greatest of 3 numbers

```

n=int(input("Enter the First number"))

n1=int(input("Enter the second number"))

n2=int(input("Enter the third number"))

if n > n1 and n1 > n2:

    print(n,"is the greatest")

elif n1 > n2:

    print(n1,"is the greatest")

else: print(n2,"is the greatest")

```

```

In [ ]: 1  ### check if a year is Leap year or not
        2  n=int(input("Enter the year"))
        3  if(n%400==0 or (n%100!=0 and n%4==0)):
        4      print("given year is leap year")
        5  else:
        6      print("given year is not leap year")

```

```

In [4]: 1  ##### check if a number exists in a given range
        2  n1=int(input("Enter the first number"))
        3  lb=int(input("Enter the lower bound"))
        4  ub=int(input("Enter the upper boubd"))
        5  if(n1 > lb and n1 < ub):
        6      print("Yes")
        7  else:
        8      print("No")

```

```

Enter the first number10
Enter the lower bound5
Enter the upper boubd15
Yes

```

```

In [13]: 1  ## check if a number of digits in a number
        2  n1=int(input("Enter the number "))
        3  c=0
        4  while(n1!=0):
        5      n1=n1//10
        6      c=c+1
        7  print(c)
        8

```

```

Enter the number 2345
4

```

```
In [5]: 1  ###check if a number is a multiple of 10
2  n1=int(input("Enter the number"))
3  if(n1%10==0):
4      print("multiple of 10")
5  else:
6      print("not a multiple of 10")
7
```

Enter the number5
not a multiple of 10

```
In [6]: 1  ###check if a number is factor of 1000
2  n1=int(input("Enter the number"))
3  if(n1%1000==0):
4      print("yes")
5  else:
6      print("no")
```

Enter the number2000
yes

```
In [9]: 1  ###check if given string is equal to a number
2  s1="123"
3  n1=1234
4  if str(n1)==s1:
5      print(n1,"is equal to",s1)
6  else:
7      print(n1,"is not equal to",s1)
```

1234 is not equal to 123

```
In [10]: 1  ### calculate the square of a number
2  n1=123
3  n1 ** 0.5
```

Out[10]: 11.090536506409418

```
In [11]: 1  ### calculate the no of nano seconds
2  y=2019
3  if(y%400==0 or (y%100!=100 and y%4==0)):
4      print(366 * 24 * 60 * 60 *(100**9))
5  else:
6      print(365 * 24 * 60 * 60 *(100**9))
```

3153600000000000000000000000

```
In [ ]: 1  ###calculate the given no is prime or not
        2  n1=int(input("Enter the number"))
        3  i=1
        4  c=0
        5  while(i<=n1):
        6      if(n1%i==0):
        7          c=c+1
        8          i=i+1
        9  if(c==1):
       10      print("prime")
       11  else:
       12      print("not a prime")
       13
```

```
In [ ]: 1
```