Notebook Basics

Markdown Basics

IB

- Normal Text
- Sublist1 *sublist2

1. Ordered List

<img src = "logo.png"

- ☐ option 1

Python Basics

pyhton version 3.7

In [19]:
```
print("GOOD AFTERNOON !")
print("Hello Python")
print("Good Afternoon","Hello Python")
```

```
GOOD AFTERNOON !
Hello Python
Good Afternoon Hello Python
```

In [ ]:
```

```

Assignment

In [23]:
```
n1 = 123456  # single variable assignment

n4 = n2= n3 = n1 # multi variable assignment

a,b,c = 123,234,345 # Multi variable assignment with differentvalues

print (a,b,c)
```

```
123 234 345
```

In [ ]:
```

```

Arthimetic operations

- +

- -
- *
- /
- ^
- %

In [25]:
```
n1 % 11

n3 = n2 ** 12

type(n3)

len(str(n3))
```

Out[25]:
```
62
```

Data Types and Conversions

- string
- int
- float

In [30]:
```
type(a)j
s1 = "chaitu"
type(s1)

f1 = 12.345
type(f1)

str(int(f1))

float(str(int(f1)))
```

Out[30]:
```
12.0
```

Conditionals

In [44]:
```
if n3 < 10 ** 2 :
    print("true")
else:
    print("false")
```

```
false
```

In [48]:
```
# check if a number is even
n = int(input("Enter the Number"))
if n%2 ==0:
    print("Even")
else:
    print("odd")
```

```
Enter the Number234
Even
```

In [50]:
```
# Greatest of three numbers

n1 = input("Enter the first Number")
n2 = input("Enter the second Number")
n3 = 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")
```

```
Enter the first Number36
Enter the second Number54
Enter the third Number45
54 is the greatest
```

In [54]:
```
#chechk if the year is leap year

year = eval(input("Enter the year"))
if year%400 == 0 or (year%100!=0 and year%4 == 0):
    print(year,"leap year")
else:
    print(year,"not a leap year")
```

```
Enter the year2004
2004 leap year
```

In [55]:
```
#check if the given number exists in a given range

n = eval(input("Enter the value"))
lb = eval(input("Enter the lower Bound"))
ub = eval(input("Enter the upper bound"))
if n>=lb and n<=ub:
    print("inside the bound")
else:
    print("outside the bound")
```

```
Enter the value21
Enter the lower Bound23
Enter the upper bound24
outside the bound
```

In [57]:
```
#check if the numebr is multiple of 10

n = eval(input("enter the value"))
if n% 10 == 0:
    print("multiple of 10")
else:
    print("not a multiple of 10")
```

```
enter the value100
multiple of 10
```

In [59]:
```
#check if the number is factor of 1000

n = eval(input("enter the value"))
if n% 1000 == 0:
    print("Factor of 1000")
else:
    print("not a factor of 1000")
```

```
enter the value1500
not a factor of 1000
```

In [62]:
```
#check if the given string is equal to a number

n = input("please Enter String")
m = int(input("please Enter number"))
if n==str(m):
    print("both are equal")
else:
    print("both are not equal")
```

```
please Enter String123456
please Enter number123456
both are equal
```

In [60]:
```
#count the number of digits in a number

Number = int(input("Please Enter any Number: "))
Count = 0
while(Number > 0):
    Number = Number // 10
    Count = Count + 1

print("\n Number of Digits in a Given Number = %d" %Count)
```

```
Please Enter any Number: 1231423567

 Number of Digits in a Given Number = 10
```

In [67]:
```
#calculate the number of micro seconds in given year


year = eval(input("Enter the year"))
if year%400 == 0 or (year%100!=0 and year%4 == 0):
    print(366*24*60*60*(10**9))
else:
    print(365*24*60*60*(10**9))
```

```
Enter the year2015
31536000000000000
```

In [65]:
```
#calculate the square root of a number without the prebuild functions

n1 = int(input("please enter the number"))
n1 ** 0.5
```

```
please enter the number4
```

Out[65]:
```
2.0
```

In [ ]:
```

```