2ND JULY TASK - Python Basics

import math module

In [1]:
```
x = sqrt(25)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[1], line 1
----> 1 x = sqrt(25)

NameError: name 'sqrt' is not defined
```

In [2]:
```
import math
math.sqrt(25)
```

Out[2]: 5.0

In [4]:
```
import math as m
print(m.sqrt(25))
print(m.pow(3,2))
print(m.floor(25.66))
print(m.ceil(25.66))
```

```
5.0
9.0
25
26
```

In [6]:
```
m.pi
```

Out[6]: 3.141592653589793

In [7]:
```
m.e
```

Out[7]: 2.718281828459045

In [10]:
```
from math import sqrt,floor,pow
print(sqrt(25))
print(floor(25.9))
print(pow(2,2))
```

```
5.0
25
4.0
```

In [12]:
```
print(ceil(20,2)) # as we didnt import the 'ceil' function in 'from' statement t
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[12], line 1
----> 1 print(ceil(20,2))

NameError: name 'ceil' is not defined
```

In [13]:
```
round(pow(2,3))
```

Out[13]: 8

user input function / command line input

In [15]:
```
x = input()
y = input()
z = x + y
print(z) #bydefault it akes string as an input so if we try to add two no. it wi
```

```
1020
```

In [18]:
```
x1 = input('Enter 1st no.')
x2 = input('Enter 2nd no.')
z = x1 + x2
z #bydefault it takes string as an input so if we try to add two no. it will jus
```

Out[18]: '1214'

In [20]:
```
x1 = int(input('Enter 1st no.'))
x2 = int(input('Enter 2nd no.'))
z = x1 + x2
z #by using 'int keyword with input() we can do calculations
```

Out[20]: 30

In [21]:
```
type(x1)
type(x2)
```

Out[21]: int

In [22]:
```
type(z)
```

Out[22]: int

In [23]:
```
ch = input("enter a char")
ch
```

Out[23]: 'Enthuziaze'

In [24]:
```
ch[0]
```

Out[24]: 'E'

In [25]:
```
ch[4]
```

Out[25]: 'u'

In [26]:
```
ch[8]
```

Out[26]: 'z'

In [27]:
```
ch = input("enter a char")[3]
ch #we can also do index slicing at the time of taking input also
```

Out[27]: 'h'

In [28]:
```
ch = input("enter a char")[1:3]
ch
```

Out[28]: 'NT'

In [30]:
```
ch = input('enter a char')
print(ch) #we get same o/p as what we defined
```

```
2 + 6 - 10
```

evaluate function using input

In [31]:
```
result = eval(input('enter an expr'))
print(result)
```

```
-65.5
```

In [32]:
```
#'eval' keyword can be used for calculation of numbers in an expression
```