8:30 AM -- BASIC PYTHON PROGRAMMING TODAY

In [1]:
```python
1  import sys
2  sys.version
```

Out[1]: '3.9.13 (main, Aug 25 2022, 23:51:50) [MSC v.1916 64 bit (AMD64)]'

work with numbers

In [2]:
```python
1  3
```

Out[2]: 3

In [3]:
```python
1  2
```

Out[3]: 2

In [4]:
```python
1  3 + 2
```

Out[4]: 5

In [5]:
```python
1  3 - 2
```

Out[5]: 1

In [6]:
```python
1  3 * 2
```

Out[6]: 6

In [7]:
```python
1  3 ** 2
```

Out[7]: 9

In [8]:
```python
1  10 / 5
```

Out[8]: 2.0

In [9]:
```python
1  10 // 5
```

Out[9]: 2

In [10]:
```python
1  # work with string
```

```
In [11]:    1  nareshit
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_368\2904615919.py in <module>
----> 1 nareshit

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

```
In [ ]:    1  'nareshit'
```

```
In [12]:    1  " nareshit "
```

Out[12]: ' nareshit '

```
In [13]:    1  ''' naresh it '''
```

Out[13]: ' naresh it '

variable = object

```
In [14]:    1  v = 5 #v - variable & 5 for value
            2  v
```

Out[14]: 5

```
In [15]:    1  type(v)
```

Out[15]: int

```
In [16]:    1  v1 = 'nit'
            2  v2
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_368\3818531641.py in <module>
      1 v1 = 'nit'
----> 2 v2

NameError: name 'v2' is not defined
```

```
In [17]:    1  v1
```

Out[17]: 'nit'

26 Th

In [18]:
```python
1  a = 5.5
2  type(a)
```

Out[18]: float

In [19]:
```python
1  import sys
2  syst.version
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_368\13462845.py in <module>
      1 import sys
----> 2 syst.version

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

In [20]:
```python
1  nit = 15
2  NIT
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_368\282885081.py in <module>
      1 nit = 15
----> 2 NIT

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

In [21]:
```python
1  nit
```

Out[21]: 15

In [22]:
```python
1  1a = 67
2  1a
```

```
  File "C:\Users\Lenovo\AppData\Local\Temp\ipykernel_368\3794310268.py", line 1
    1a = 67
     ^
SyntaxError: invalid syntax
```

In [23]:
```python
1  a1 = 67
2  a1
```

Out[23]: 67

In [24]:
```python
1  nit$ = 89
2  nit$
```

```
  File "C:\Users\Lenovo\AppData\Local\Temp\ipykernel_368\629152561.py", line 1
    nit$ = 89
       ^
SyntaxError: invalid syntax
```

In [25]:
```python
1  x_train, x_test, y_train, y_test = 80, 20, 70, 30
2
```

In [26]:
```python
1  x_train
2  x_test
3  y_train
4  y_test
```

Out[26]: 30

In [27]:
```python
1  print(x_train)
2  print(x_test)
3  print(y_train)
4  print(y_test)
```

```
80
20
70
30
```

In [28]:
```python
1  import keyword
2  keyword.kwlist
```

Out[28]: ['False',
'None',
'True',
'__peg_parser__',
'and',
'as',
'assert',
'async',
'await',
'break',
'class',
'continue',
'def',
'del',
'elif',
'else',
'except',
'finally',
'for',
'from',
'global',
'if',
'import',
'in',
'is',
'lambda',
'nonlocal',
'not',
'or',
'pass',
'raise',
'return',
'try',
'while',
'with',
'yield']

In [29]:
```python
1  if = 90
2  if
```

```
  File "C:\Users\Lenovo\AppData\Local\Temp\ipykernel_368\3964871498.py", line 1
    if = 90
       ^
SyntaxError: invalid syntax
```

In [30]:
```python
1  a10 = 78
2  a9 = 89
```

In [31]:
```
1  print(a10)
2  print(a9)
```

78
89

In [32]:
```
1  del a10
```

In [33]:
```
1  a10
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_368\2318078267.py in <module>
----> 1 a10

NameError: name 'a10' is not defined
```

In [34]:
```
1  for = 90
```

```
  File "C:\Users\Lenovo\AppData\Local\Temp\ipykernel_368\2697860034.py", line 1
    for = 90
        ^
SyntaxError: invalid syntax
```

In [35]:
```
1  For = 90
2  For
```

Out[35]: 90

In [36]:
```
1  a = True
2  a
```

Out[36]: True

In [37]:
```
1  b = 'true'
2  b
```

Out[37]: 'true'

In [38]:
```
1  pi = 3.17
2  pi
```

Out[38]: 3.17

In [39]:
```
1  pi = 3.20
2  pi
```

Out[39]: 3.2

```
In [40]:    1 aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa = 90
            2 aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

Out[40]: 90

Python variable notes

Syntax : variable_name = value

```
            1 ### Type of variables
```

```
In [45]:    1 #integer Variable
            2
            3 age = 25
            4 print(age)
            5 print(type(age))
```

```
25
<class 'int'>
```

```
In [42]:    1 #String variable
            2
            3 name = 'Alice'
            4 print(name)
            5 print(type(name))
```

```
Alice
<class 'str'>
```

```
In [43]:    1 #Float Variable
            2
            3 price = 19.99
            4 print(price)
            5 print(type(price))
```

```
19.99
<class 'float'>
```

```
In [44]:    1 #Boolean variable
            2
            3 is_active = True
            4 print(is_active)
            5 print(type(is_active))
```

```
True
<class 'bool'>
```

1. Storing and printing a value

```
In [46]:    1  #storing the value 10 in a variable called 'x'
            2
            3  x=10
            4  #printing the value of 'x'
            5  print(x)
```

10

2. Using variable as expression

```
In [47]:    1  #Assigning values to variables
            2  a=10
            3  b=3
            4
            5  #Adding and storing
            6  result = a+b
            7  print(result)
```

13

3. Changing the value of variable

```
In [48]:    1  score =10
            2  print(score)
            3  score = 20
            4  print(score)
```

10
20

4. Concatenating string

```
In [49]:    1  name1 ='Deepti' +' '+'Jaiswar'
            2  print(name1)
```

Deepti Jaiswar

5. Using variables in a Calculation

```
In [51]:   1  length = 5
           2  breath = 6
           3  area = length * breath
           4  print(area)
```

```
30
```

```
In [54]:   1  #Reassigning values to varibale
           2
           3  x=10
           4  print(x,type(x))
           5  x=20
           6  print(x,type(x))
           7  x='Deepti'
           8  print(x,type(x))
```

```
10 <class 'int'>
20 <class 'int'>
Deepti <class 'str'>
```

```
In [ ]:    1
```

```
           1  # Variable are completed
```

```
In [ ]:    1
```

```
In [ ]:    1
```

```
In [ ]:    1
```

```
In [ ]:    1
```

```
In [ ]:    1
```