8th april 25 python variable

In [2]:
```
v1 = 5.5
v1
```

Out[2]: 5.5

In [4]:
```
type(v1)
float
```

Out[4]: float

In [6]:
```
v_ = 9
v_
```

Out[6]: 9

In [8]:
```
if = 67
```

```
  Cell In[8], line 1
    if = 67
       ^
SyntaxError: invalid syntax
```

In [10]:
```
import keyword
keyword.kwlist
```

Out[10]:
```
['False',
 'None',
 'True',
 '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 [12]:
```
len(keyword.kwlist)
```

Out[12]:
```
35
```

In [16]:
```
while = 9
```

```
  Cell In[16], line 1
    while = 9
          ^
SyntaxError: invalid syntax
```

In [20]:
```
nit = 8
NIT
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[20], line 2
      1 nit = 8
----> 2 NIT

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

In [22]:
```
Nit = 8
```

```
nit
```

Out[22]: 8

In [ ]:
```
RULES TO IDENTIFY PYTHON VARIABLES
-case sensitive
-cannot start with digit
-special symbol is not allowed
-only_ is allowed
-keywords or reserve can define as variable
```

In [ ]:
```
VARIABLE NAME = VALUE VALUES ALSO CALLED
data types
-int
-float
-string
-complex
-boolen
```

In [30]:
```
i = 7
i
```

Out[30]: 7

In [32]:
```
type(i)
i
```

Out[32]: 7

In [44]:
```
a, b = 10, 20
```

In [48]:
```
c = a+b
d = a-b
c
d
```

Out[48]: -10

In [50]:
```
c = a+b
d = a-b
e = a * b
f = a / b

print(c)
print(d)
print(e)
print(f)
```

```
30
-10
200
0.5
```

10th may 25

In [ ]:
```

```

python data types

In [4]:
```
i = 5
type(i)
```

Out[4]: int

In [6]:
```
f = 110.4
f
```

Out[6]: 110.4

In [10]:
```
type(f)
```

Out[10]: float

In [13]:
```
c = 10 + 20j
c
```

Out[13]: (10+20j)

In [15]:
```
type(c)
```

Out[15]: complex

In [17]:
```
c.real
```

Out[17]: 10.0

In [19]:
```
c.imag
```

Out[19]: 20.0

In [25]:
```
d = 5 + 3j
d
```

Out[25]: (5+3j)

In [27]:
```
print(c)
print(d)
```

```
(10+20j)
(5+3j)
```

In [29]:
```
c + d
```

Out[29]: (15+23j)

In [37]:
```
True
```

Out[37]: True

In [39]:
```
False
```

Out[39]: False

In [41]:
```
True + False
```

Out[41]: 1

In [43]:
```
True - False
```

Out[43]: 1

In [45]:
```
False  * False
```

Out[45]: 0

In [49]:
```
b = True
b1 = False
```

In [53]:
```
print(b+b1)
print(b-b1)
print(b*b1)
print(b1/b)
print(b1//b)
```

```
1
1
0
0.0
0
```

In [57]:
```
s =' nit'
s
```

Out[57]: ' nit'

In [59]:
```
s1 = 'nit'
s1
```

Out[59]: 'nit'

In [61]:
```
s3 = 'nit'
s3
```

Out[61]: 'nit'

In [ ]:

In [ ]:

In [ ]:

In [33]:
```
z =' 4.4'
type(z)
```

Out[33]: str

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: