In [1]:
```
import sys
import keyword
import operator
from datetime import datetime
import os
```

keywords

In [2]:
```
print(keyword.kwlist)
```

```
['False', 'None', 'True', 'and', 'as', 'assert', 'async', 'await', 'break', 'clas
s', '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 [3]:
```
len(keyword.kwlist)
```

Out[3]: 35

Idendifier

In [4]:
```
1var=10
```

```
  Cell In[4], line 1
    1var=10
    ^
SyntaxError: invalid decimal literal
```

In [5]:
```
var12@=15
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[5], line 1
----> 1 var12@=15

NameError: name 'var12' is not defined
```

In [6]:
```
import=120
import
```

```
  Cell In[6], line 1
    import=120
           ^
SyntaxError: invalid syntax
```

In [ ]:
```
val2=10
val
```

In [7]:
```
val=90
val
```

Out[7]: 90

comments in python

In [8]:
```
val1=10
val1
```

Out[8]: 10

In [9]:
```
'''multiple
line
comment'''
val=10
```

statements

In [10]:
```
p=20
q=20
r=q
p,type(p),hex(id(p))
```

Out[10]: (20, int, '0x7ffa72efb608')

In [11]:
```
q,type(q),hex(id(q))
```

Out[11]: (20, int, '0x7ffa72efb608')

In [12]:
```
r,type(r),hex(id(r))
```

Out[12]: (20, int, '0x7ffa72efb608')

In [13]:
```
p=20
p=p+20
p
```

Out[13]: 40

variable assignment

In [14]:
```
intvar=13
floatvar=20.5
strvar='swapna'
print(intvar)
print(floatvar)
print(strvar)
```

```
13
20.5
swapna
```

In [15]:
```
intvar,floatvar,strvar=10,20.4,'swapna'
print(intvar)
print(floatvar)
print(strvar)
```

```
10
20.4
swapna
```

In [16]:
```
p1=p2=p3=p4=40
print(p1,p2,p3,p4)
```

```
40 40 40 40
```

data types

In [17]:
```
val1 = 10
print (val1)
print(type(val1))
print(sys.getsizeof(val1))
```

```
10
<class 'int'>
28
```

In [18]:
```
val2=10.5
print(val2)
print(type(val2))
print(sys.getsizeof(val2))
```

```
10.5
<class 'float'>
24
```

In [19]:
```
bool1=True
bool1
```

Out[19]: True

In [20]:
```
bool2=False
bool2
```

Out[20]: False

In [21]:
```
print (type(bool1))
```

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

In [22]:
```
print (type(bool2))
```

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

In [23]:
```
isinstance(bool1, bool)
```

Out[23]: True

In [24]:
```
bool(0)
```

Out[24]: False

In [25]:
```
bool(1)
```

Out[25]: True

In [26]:
```
bool(None)
```

Out[26]: False

StringCreation

In [27]:
```
str1=('hello python')
print(str1)
```

```
hello python
```

In [28]:
```
mystr=('hello world')
print(mystr)
```

```
hello world
```

In [29]:
```
len(str1)
```

Out[29]: 12

In [30]:
```
len(mystr)
```

Out[30]: 11

In [31]:
```
str1[0]
```

Out[31]: 'h'

In [32]:
```
mystr[1]
```

Out[32]: 'e'

In [33]:
```
len[str1(str1(-1))]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[33], line 1
----> 1 len[str1(str1(-1))]

TypeError: 'str' object is not callable
```

In [34]:
```
str1[len(str1)-1]
```

Out[34]: 'n'

In [35]:
```
str1[-3]
```

Out[35]: 'h'

In [36]:
```
str1[6]
```

Out[36]: 'p'

In [37]:
```
mystr[4]
```

Out[37]: 'o'

slicing

In [38]:
```
str1
```

Out[38]: 'hello python'

In [39]:
```
str1[:]
```

Out[39]: 'hello python'

In [40]:
```
str1[:2]
```

Out[40]: 'he'

In [41]:
```
str1[::2]
```

Out[41]: 'hlopto'

In [42]:
```
str1[:3]
```

Out[42]: 'hel'

In [43]:
```
str1[1:10:2]
```

Out[43]: 'el yh'

delete or update string

In [44]:
```
str1
```

Out[44]: 'hello python'

In [45]:
```
str1[0:5]
```

Out[45]: 'hello'

In [46]:
```
del(str1)
print(str1)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[46], line 2
      1 del(str1)
----> 2 print(str1)

NameError: name 'str1' is not defined
```

concatnation=adding

In [47]:
```
s1='welcome'
s2='to'
s3='new world'
print(s1 +s2 +s3)
```

```
welcometonew world
```

In [48]:
```
print(s1)
```

```
welcome
```

In [ ]:

In [ ]:

In [ ]:

In [ ]: