

PYTHON VARIABLE

```
In [2]: va = 9  
va
```

```
Out[2]: 9
```

```
In [3]: id(va)
```

```
Out[3]: 140729053162168
```

```
In [4]: 1nit = 18  
1nit
```

```
Cell In[4], line 1  
    1nit = 18  
    ^  
SyntaxError: invalid decimal literal
```

```
In [5]: nit1 = 18  
nit1
```

```
Out[5]: 18
```

```
In [7]: nit2 = 19  
NIT2
```

```
-----  
NameError                                Traceback (most recent call last)  
Cell In[7], line 2  
      1 nit2 = 19  
----> 2 NIT2  
NameError: name 'NIT2' is not defined
```

```
In [8]: nit2
```

```
Out[8]: 19
```

```
In [9]: v$ = 90  
v$
```

```
Cell In[9], line 1  
    v$ = 90  
    ^  
SyntaxError: invalid syntax
```

```
In [10]: v_ = 90  
v_
```

```
Out[10]: 90
```

```
In [12]: import keyword  
keyword.kwlist
```

```
Out[12]: ['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 [13]: len(keyword.kwlist)
```

```
Out[13]: 35
```

```
In [14]: for = 67  
for
```

```
Cell In[14], line 1  
    for = 67  
    ^  
SyntaxError: invalid syntax
```

```
In [15]: For = 67  
For
```

```
Out[15]: 67
```

```
In [16]: def = 90  
def
```

```
Cell In[16], line 1  
def = 90  
    ^  
SyntaxError: invalid syntax
```

```
In [17]: Def = 90  
Def
```

Out[17]: 90

```
In [18]: 3a = 89
```

```
Cell In[18], line 1  
3a = 89  
    ^  
SyntaxError: invalid decimal literal
```

```
In [19]: True = 8
```

```
Cell In[19], line 1  
True = 8  
    ^  
SyntaxError: cannot assign to True
```

```
In [21]: true = 8  
true
```

Out[21]: 8

```
In [22]: a = 5  
b = 7  
c = 9
```

```
a  
b  
c
```

Out[22]: 9

```
In [23]: a = 5  
b = 7  
c = 9  
  
print(a)  
print(b)  
print(c)
```

```
5  
7  
9
```

```
In [24]: import sys  
sys.version
```

```
Out[24]: '3.12.7 | packaged by Anaconda, Inc. | (main, Oct 4 2024, 13:17:27) [MSC v.1929 6  
4 bit (AMD64)]'
```

```
In [25]: import_1 = 89  
import_1
```

```
Out[25]: 89
```

Variable concept in variable

Example 1: Integer Variable

```
In [27]: age = 25  
print(age)
```

25

Example 2: String Variable

```
In [28]: name = "Alice"  
print(name)
```

Alice

Example 3: Float Variable

price = 19.99 print(price)

Example 4: Boolean Variable

```
In [30]: is_active = True  
print(is_active)
```

True

1. Storing and Printing a Value

```
In [32]: x = 10 # Storing the value 10 in a variable called 'x'  
print(x) # Printing the value of 'x'
```

10

2. Using Variable in Expressions

```
In [33]: # Assigning Values to Variable
a = 5
b = 3
result = a + b # adding two variables and storing the result in 'result'
print(result)
```

8

3. Changing the Value of a Variable

```
In [35]: score = 50 # Initial value
print(score)
```

50

```
In [36]: score = 100 # Changing the value of 'score'
print(score)
```

100

4. Concatenating Strings

```
In [47]: # Assigning values to variables
first_name = "John"
last_name = "Doe"
print(first_name)
print(last_name)

# Concatenating strings and storing in a new variable
full_name = first_name + " " + last_name
print(full_name)
```

John

Doe

John Doe

5. Using Variables in a Calculation

```
In [48]: # Assigning values to variables
length = 10
width = 5

# Calculating the area of a rectangle
area = length * width
print(area)
```

50

6. Reassigning Values to Variables

```
In [50]: x = 10 # Initial value of x
print(x)
```

```
# Reassigning the value of x
```

```
x = 20  
print(x)
```

```
10
```

```
20
```

In []: