Variable , Object , Identifier

```
In [1]:  # STRING VARIABLE

         name = 'shaikh Razekh'    # name is a variable and 'shaikh razekh' is value
         name
```

Out[1]: 'shaikh Razekh'

```
In [2]:  name = "Naresh it"
         name
```

Out[2]: 'Naresh it'

```
In [3]:  hr_name = "Admin"
         hr_name
```

Out[3]: 'Admin'

```
In [4]:  advice = "always ba HAPPY"
         advice
```

Out[4]: 'always ba HAPPY'

```
In [5]:  # INTEGER VARIABLE

         age = 20        # age is a variable and 20 is value
         age
```

Out[5]: 20

```
In [6]:  num = 9096
         num
```

Out[6]: 9096

```
In [7]:  score = 15
         score
```

Out[7]: 15

```
In [9]:  marks = 94.58
         marks
```

Out[9]: 94.58

```
In [10]:  # FLOAT VARIABLE

          price = 999.99          # price is a variable and 999.99 is value
          price
```

Out[10]: 999.99

```
In [11]:  # BOOLEAN VARIABLE
```

```
is_active = True
is_active                # is_active is a variable and True is value
```

Out[11]: True

In [12]:
```
clg = False
clg
```

Out[12]: False

In [13]:
```
if = 5                # 'if' is the reserved word in python . in python 35 words a
if
```

```
  Cell In[13], line 1
    if = 5                # 'if' is the reserved word in python . in python 35 word
s are reserved words.
       ^
SyntaxError: invalid syntax
```

In [14]:
```
import keyword
keyword.kwlist
```

Out[14]: ['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 [15]:
```
len(keyword.kwlist)
```

Out[15]:   35

1 STORING AND PRINTING VALUE

```
In [17]:  # Store the value 10 in the variable called 'x'

          x = 10            # printing the value 'x'
          print(x)
```

          10

```
In [18]:  a = 100                  #In Variable we assgn int data type
          print(a)
```

          100

```
In [19]:  b = 17.17335            # in Variable we assgn float data type
          print(b)
```

          17.17335

```
In [20]:  y = 5342                # In Variable we assgn int data type
          print(y)
```

          5342

```
In [21]:  name = 'shaikh razekh'        # In Variable we assgn string data type
          print(name)
```

          shaikh razekh

```
In [22]:  batch = 'FSDS'          # In Variable we assgn string data type
          batch
```

Out[22]:   'FSDS'

```
In [23]:  v1 = 9          # this is valid
          v1
```

Out[23]:   9

2 USING VARIABLE IN EXPRESSION

```
In [24]:  # Assigning value to variable
          a = 5
          b = 4                    #     Addition of two numbers using variable
          print(a + b)
```

          9

```
In [25]:  a = 845
          b = 532                  #  Substraction of two numbers using variable
          print(a - b)
```

          313

```
In [26]:  x = 456
          y = 654                  #  Multiplication of two numbers using variable
```

```python
print(x * y)
```

298224

In [27]:
```python
a = 525
b = 121                      # Float Division of two numbers using variable
print(a / b)
```

4.338842975206612

In [28]:
```python
a = 525
b = 121                      #  Int Division of two numbers using variable
b = 121
print(a // b)
```

4

In [29]:
```python
a = 5
b = 5                        #  Power of two numbers using variable
print(a ** b)
```

3125

In [30]:
```python
name = "NIT"
name            # Define and call the same Variable. not another variable.
```

Out[30]: 'NIT'

3 Changing the value of a variable

In [31]:
```python
# initial value
score = 50
print (score)        #output is  50

# changing the value of 'score'

score = 100
print(score)          #output is  50
```

50
100

In [32]:
```python
a = 90
print(a)

# changing value

a = 33
print(a)
```

90
33

In [33]:
```python
marks = 98.99
print(marks)

# changing value..

marks = 78.99
print(marks)
```

```
98.99
78.99
```

In [34]:
```python
name = 'solo'
print(name)

# changing value..

name = 'bolo'
print(name)
```

```
solo
bolo
```

4 Concatenation Strings

In [36]:
```python
# assigning value to variable

first_name = 'razekh'
second_name = 'shaikh'

# concatenating strings and storing in a new variable

full_name = first_name+  " "  + second_name
print(full_name)
```

```
razekh shaikh
```

In [37]:
```python
a = 'Naresh'
b = 'IT'

a = a +' ' + b
print(a)
```

```
Naresh IT
```

In [38]:
```python
x = "Good"
y = 'Night'

z = x +" " + y
print(z)
```

```
Good Night
```

Using Variable in a Calculation

In [39]:
```python
# Assigning value to variable

a = 10
b = 5

# Calculation the area of a recangle

area = a * b
print(area)
```

```
50
```

```python
In [40]:  # Assigning value to variable

          a = 50
          b = 60

          # find average of two value

          avg = ((a + b)/ 2)

          print(avg)
```

```
55.0
```

Reassigning Value to Variable

```python
In [41]:  x = 10 # initial value of x
          print(x)                        # out put is  [10]

          # reassigning the value of x

          x = 20
          print(x)                        # output is 20
```

```
10
20
```

```python
In [4]:   x = 100 # initial value of x
          print(x)                        # out put is  [10]

          # reassigning the value of x

          x = 205
          print(x)                        # output is 20
```

```
100
205
```

```python
In [1]:   a = 100
          print(a)

          # reassigning value..

          a = 1000
          print(a)
```

```
100
1000
```

```
In [ ]:
```