In [1]:
```
print('Addition: ', 1 + 2)
print('Subtraction: ', 2 - 1)
print('Multiplication: ', 2 * 3)
print ('Division: ', 4 / 2)
print('Division: ', 6 / 2)
print('Division: ', 7 / 2)
print('Division without the remainder: ', 7 // 2)
print('Modulus: ', 3 % 2)
print ('Division without the remainder: ', 7 // 3)
print('Exponential: ', 3 ** 2)
```

```
Addition:  3
Subtraction:  1
Multiplication:  6
Division:  2.0
Division:  3.0
Division:  3.5
Division without the remainder:  3
Modulus:  1
Division without the remainder:  2
Exponential:  9
```

In [2]:
```
print('Floating Number,PI', 3.14)
print('Floating Number, gravity', 9.81)
```

```
Floating Number,PI 3.14
Floating Number, gravity 9.81
```

In [3]:
```
print('Complex number: ', 1 + 1j)
print('Multiplying complex number: ',(1 + 1j) * (1-1j))
```

```
Complex number:  (1+1j)
Multiplying complex number:  (2+0j)
```

In [4]:
```
a=3
b=2
```

In [5]:
```
total = a + b
diff = a - b
product = a * b
division = a / b
remainder = a % b
floor_division = a // b
exponential = a ** b
```

In [6]:
```
print(total)
print('a + b = ', total)
print('a - b = ', diff)
print('a * b = ', product)
print('a / b = ', division)
print('a % b = ', remainder)
print('a // b = ', floor_division)
print('a ** b = ', exponential)
```

```
5
a + b =  5
a - b =  1
a * b =  6
a / b =  1.5
a % b =  1
a // b =  1
a ** b =  9
```

In [7]:
```
num_one = 3
num_two = 4
```

In [8]:
```
total = num_one + num_two
diff = num_two - num_one
product = num_one * num_two
div = num_two / num_two
remainder = num_two % num_one
```

In [9]:
```
print('total: ', total)
print('difference: ', diff)
print('product: ', product)
print('division: ', div)
print('remainder: ', remainder)
```

```
total:  7
difference:  1
product:  12
division:  1.0
remainder:  1
```

In [10]:
```
radius=10
area_of_circle=3.14*radius**2
print('Area of a circle:', area_of_circle)
```

```
Area of a circle: 314.0
```

In [11]:
```
length = 10
width = 20
area_of_rectangle = length * width
print('Area of rectangle:', area_of_rectangle)
```

```
Area of rectangle: 200
```

In [12]:
```
mass = 75
gravity = 9.81
weight = mass * gravity
print(weight, 'N')
```

```
735.75 N
```

In [13]:
```
print(3 > 2)
print(3 >= 2)
print(3 < 2)
print(2 < 3)
print(2 <= 3)
print(3 == 2)
print(3 != 2)
print(len('mango') == len('avocado'))
print(len('mango') != len('avocado'))
print(len('mango') < len('avocado'))
print(len('milk') != len('meat'))
```

```
print(len('milk') == len('meat'))
print(len('tomato') == len('potato'))
print(len('python') > len('dragon'))
```

```
True
True
False
True
True
False
True
False
True
True
False
True
True
False
```

In [14]:
```
print('True == True: ', True == True)
print('True == False: ', True == False)
print('False == False:', False == False)
print('True and True: ', True and True)
print('True or False:', True or False)
```

```
True == True:  True
True == False:  False
False == False: True
True and True:  True
True or False: True
```

In [15]:
```
print('1 is 1', 1 is 1)
print('1 is not 2', 1 is not 2)
print('A in Asabeneh', 'A' in 'Asabeneh')
print('B in Asabeneh', 'B' in 'Asabeneh')
print('coding' in 'coding for all')
print('a in an:', 'a' in 'an')
print('4 is 2 ** 2:', 4 is 2 ** 2)
```

```
1 is 1 True
1 is not 2 True
A in Asabeneh True
B in Asabeneh False
True
a in an: True
4 is 2 ** 2: True
<>:1: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
<>:2: SyntaxWarning: "is not" with 'int' literal. Did you mean "!="?
<>:7: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
<>:1: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
<>:2: SyntaxWarning: "is not" with 'int' literal. Did you mean "!="?
<>:7: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
C:\Users\DELL\AppData\Local\Temp\ipykernel_13928\2170641193.py:1: SyntaxWarning:
"is" with 'int' literal. Did you mean "=="?
  print('1 is 1', 1 is 1)
C:\Users\DELL\AppData\Local\Temp\ipykernel_13928\2170641193.py:2: SyntaxWarning:
"is not" with 'int' literal. Did you mean "!="?
  print('1 is not 2', 1 is not 2)
C:\Users\DELL\AppData\Local\Temp\ipykernel_13928\2170641193.py:7: SyntaxWarning:
"is" with 'int' literal. Did you mean "=="?
  print('4 is 2 ** 2:', 4 is 2 ** 2)
```

In [16]:
```
print(3 > 2 and 4 > 3)
print(3 > 2 and 4 < 3)
print(3 < 2 and 4 < 3)
print(3 > 2 or 4 > 3)
print(3 > 2 or 4 < 3)
print(3 < 2 or 4 < 3)
print(not 3 > 2)
print(not True)
print(not False)
print(not not True)
print(not not False)
```

```
True
False
False
True
True
False
False
False
True
True
False
```

In [ ]:
```

```