untitled1

March 4, 2025

[5]:
```
3
```

[5]:
```
3
```

[7]:
```
"Naresh"
```

[7]:
```
'Naresh'
```

[9]:
```
1+2
```

[9]:
```
3
```

[11]:
```
2-1
```

[11]:
```
1
```

0.0.1

[14]:
```
4/2
```

[14]:
```
2.0
```

[16]:
```
6/2
```

[16]:
```
3.0
```

[18]:
```
7/2
```

[18]:
```
3.5
```

[20]:
```
7//2
```

[20]:
```
3
```

[22]:
```
3%2
```

[22]:
```
1
```

[26]:
```
3**2
```

[26]: 9

[28]:
```
3**2
```

[28]: 9

[30]:
```
3.14
```

[30]: 3.14

[32]:
```
1+1j
```

[32]: (1+1j)

[34]:
```
(1+1j)*(1-1j)
```

[34]: (2+0j)

[36]:
```
a=3
b=2
```

[81]:
```
a=3
b=2
total=a+b
diff=a-b
product=a*b
division=a/b
remainder=a%b
floor_div=a//b
expo=a**b
```

[89]:
```
print(total)
print("a+b = ",total)
print("Diff = ",diff)
print("Product = ",product)
print("Division = ",division)
print("Remainder = ",remainder)
print("Floor Divsision = ",floor_div)
print("Exponential = ",expo)
```

```
5
a+b =  5
Diff =  1
Product =  6
Division =  1.5
```

```
Remainder =  1
Floor Divsision =  1
Exponential =  9
```

[93]:
```
num_one = 3
num_two = 4
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
```

[95]:
```
print('difference: ', diff)
print('product: ', product)
print('division: ', div)
print('remainder: ', remainder)
```

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

[97]:
```
r = 10                                  # radius of a circle
area_circle=3.14*r** 2          # two * sign means exponent or power
print('Area of a circle:', area_circle)
```

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

[99]:
```
length = 10
width = 20
area_of_rectangle = length * width
print('Area of rectangle:', area_of_rectangle)
```

```
Area of rectangle: 200
```

[101]:
```
mass = 75
gravity = 9.81
weight = mass * gravity
print(weight, 'N')
```

```
735.75 N
```

[105]:
```
print(3 > 2)     # True, because 3 is greater than 2
```

```
True
```

[107]:
```
print(3 >= 2)    # True, because 3 is greater than 2
```

```
True
```

[109]:
```
print(3 < 2)     # False,  because 3 is greater than 2
```

```
False
```

[111]:
```
print(2 < 3)     # True, because 2 is less than 3
```

```
True
```

[113]:
```
print(2 <= 3)    # True, because 2 is less than 3
```

```
True
```

[115]:
```
print(3 == 2)    # False, because 3 is not equal to 2
```

```
False
```

[117]:
```
print(3 != 2)    # True, because 3 is not equal to 2
```

```
True
```

[119]:
```
print(len('mango') == len('avocado'))  # False
```

```
False
```

[121]:
```
print(len('mango') != len('avocado'))  # True
```

```
True
```

[123]:
```
print(len('mango') < len('avocado'))   # True
```

```
True
```

[125]:
```
print(len('milk') != len('meat'))      # False
```

```
False
```

[127]:
```
print(len('milk') == len('meat'))      # True
```

```
True
```

[129]:
```
print(len('tomato') == len('potato'))  # True
```

```
True
```

[131]:
```
print(len('python') > len('dragon'))   # False
```

```
False
```

[133]:
```
print('True == True: ', True == True)
```

```
True == True:  True
```

[135]:
```
print('True == False: ', True == False)
```

```
True == False:  False
```

[137]:
```
print('False == False:', False == False)
```

```
False == False: True
```

[139]:
```
print('True and True: ', True and True)
```

```
True and True:  True
```

[141]:
```
print('True or False:', True or False)
```

```
True or False: True
```

[147]:
```
print(1 is 1) # True - because the data values are the same
```

```
True
```

```
<>:1: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
<>:1: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
C:\Users\Dhanwantari Devre\AppData\Local\Temp\ipykernel_13604\3296757644.py:1:
SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
  print(1 is 1) # True - because the data values are the same
```

[149]:
```
print('1 is not 2', 1 is not 2)           # True - because 1 is not 2
```

```
1 is not 2 True
```

```
<>:1: SyntaxWarning: "is not" with 'int' literal. Did you mean "!="?
<>:1: SyntaxWarning: "is not" with 'int' literal. Did you mean "!="?
C:\Users\Dhanwantari Devre\AppData\Local\Temp\ipykernel_13604\3437817676.py:1:
SyntaxWarning: "is not" with 'int' literal. Did you mean "!="?
  print('1 is not 2', 1 is not 2)           # True - because 1 is not 2
```

[151]:
```
print('A in Asabeneh', 'A' in 'Asabeneh') # True - A found in the string
print('B in Asabeneh', 'B' in 'Asabeneh') # False -there is no uppercase B
print('coding' in 'coding for all') # True - because coding for all has the␣
 ↪word coding
print('a in an:', 'a' in 'an')      # True
print('4 is 2 ** 2:', 4 is 2 ** 2)
```

```
A in Asabeneh True
B in Asabeneh False
True
a in an: True
4 is 2 ** 2: True
```

```
<>:5: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
<>:5: SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
C:\Users\Dhanwantari Devre\AppData\Local\Temp\ipykernel_13604\1604371332.py:5:
SyntaxWarning: "is" with 'int' literal. Did you mean "=="?
  print('4 is 2 ** 2:', 4 is 2 ** 2)
```

[153]:
```
print(3 > 2 and 4 > 3) # True - because both statements are true
```

```
True
```

[155]:
```
print(3 > 2 and 4 < 3) # False - because the second statement is false
```

```
False
```

[157]:
```
print(3 < 2 and 4 < 3) # False - because both statements are false
```

```
False
```

[159]:
```
print(3 > 2 or 4 > 3)  # True - because both statements are true
```

```
True
```

[161]:
```
print(3 > 2 or 4 < 3)  # True - because one of the statement is true
```

```
True
```

[163]:
```
print(3 < 2 or 4 < 3)  # False - because both statements are false
```

```
False
```

[ ]:
```
print(not 3 > 2)     # False - because 3 > 2 is true, then not True gives False
```

[ ]:

[ ]:

[ ]: