Table of contents

In [12]:
```
a = 5
b = 2
```

---

1. Add

(go to top)

In [2]:
```
a + b
```

Out[2]: 7

2. Subtract

(go to top)

In [3]:
```
a - b
```

Out[3]: 3

3. Multiply

(go to top)

In [4]:
```
a * b
```

Out[4]: 10

4. Divide

(go to top)

In [5]:
```
a / b
```

Out[5]: 2.5

---

5. Integer / Floor divide,

- dropping any fractional remainder
  (go to top)

In [6]:
```
a // b
```

Out[6]: 2

---

6. Raise to the power

(go to top)

In [7]:
```
a ** b
```

Out[7]: 25

---

7. Equals

- True if a equals b
(go to top)

```
In [8]: a == b
```

```
Out[8]: False
```

8. Not Equal

(go to top)

```
In [9]: a != b
```

```
Out[9]: True
```

9. Less than, Greater than or equal to

(go to top)

```
In [10]: a < b
```

```
Out[10]: False
```

```
In [11]: a <= b
```

```
Out[11]: False
```

In [12]:
```
a >= b
```

Out[12]: True

In [13]:
```
a > b
```

Out[13]: True

---

10. Is & Is Not

- True if a and b reference the same python object
(go to top)

In [14]:
```
a is not b
```

Out[14]: True

In [15]:
```
a is b
```

Out[15]: False

---

11. abs()

(go to top)

- converts to a absolute number

In [16]:
```
c = -124
print(abs(c))
```

124

In [3]:
```
b-a
```
Out[3]: -3

In [4]:
```
#get the difference between two numbers
abs(b-a)
```
Out[4]: 3

In [5]:
```
abs(a-b)
```
Out[5]: 3

---

12. round()

(go to top)

- rounds a number to the nearest whole value.
- rounds a float into another float value using a second argument

In [17]:
```
round(3.49)
```
Out[17]: 3

In [18]:
```
round(3.5)
```
Out[18]: 4

In [19]:
```
pi = 3.141592653589793
```

In [20]:
```
round(pi,2)
```
Out[20]: 3.14

In [21]:
```
round(pi,4)
```
Out[21]: 3.1416

In [ ]:

13. max()

(go to top)

In [6]:
```
max(a,b)
```

Out[6]: 5

In [11]:
```
max([1, 2, 5, 9])
```

Out[11]: 9

14. min()

(go to top)

In [7]:
```
min(a,b)
```

Out[7]: 2

In [10]:
```
min([1, 2, 5, 9])
```

Out[10]: 1

15. sum()

(go to top)

In [3]:
```
test_list =  [1, 2, 5, 9]
```

In [8]:
```
test_tuple =  (1, 2, 5, 9)
```

In [4]:
```
sum(test_list)
```

Out[4]: 17

In [4]:
```
sum(test_list)
```

Out[4]: 17

In [14]:
```
# a three to the sum

sum(test_list, 3)
```

Out[14]: 20

In [17]:
```
average = sum(test_list) / len(test_list)
average
```

Out[17]: 4.25

In [9]:
```
sum(test_tuple)
```

Out[9]: 17

In [10]:
```
# a three to the sum

sum(test_tuple, 3)
```

Out[10]: 20

In [13]:
```
# only works with iterables and numbers only

sum(a,b)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-13-af1fd7bf4585> in <module>
      1 # only works with iterables and numbers only
      2
----> 3 sum(a,b)

TypeError: 'int' object is not iterable
```

15. Title

(go to top)

In [ ]:
```

```

16. Title

(go to top)

In [ ]:
```

```

17. Title

(go to top)

In [ ]:

18. Title

(go to top)

In [ ]:

19. Title

(go to top)

In [ ]:

20. Title

(go to top)

In [ ]: