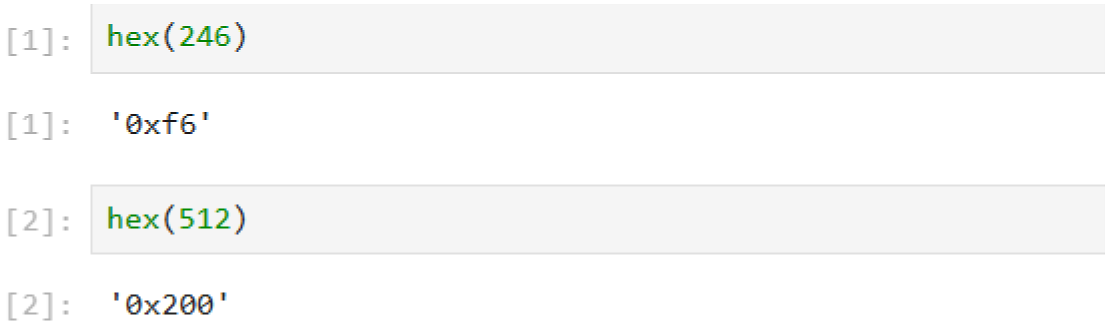
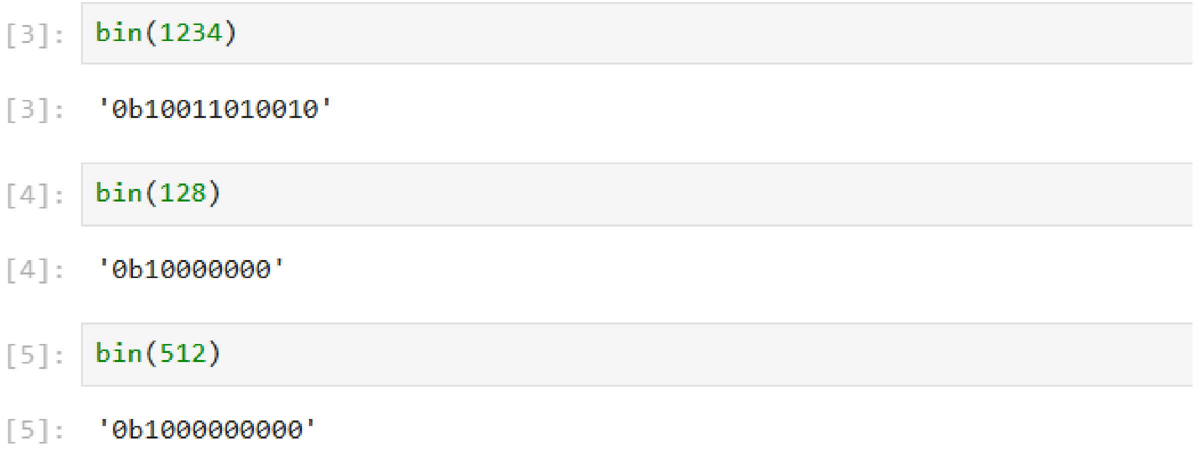
😊 Advanced Numbers

1. In this lab, we will explore several additional representations of numbers in Python.
2. Using the function hex(), you can convert numbers into a hexadecimal format.



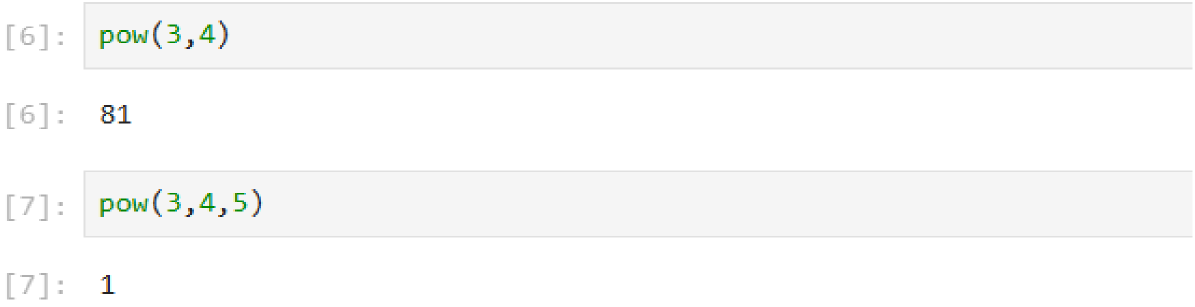
```
[1]: hex(246)

[1]: '0xf6'

[2]: hex(512)

[2]: '0x200'
```

3. Using the function bin() you can convert numbers into their binary format.



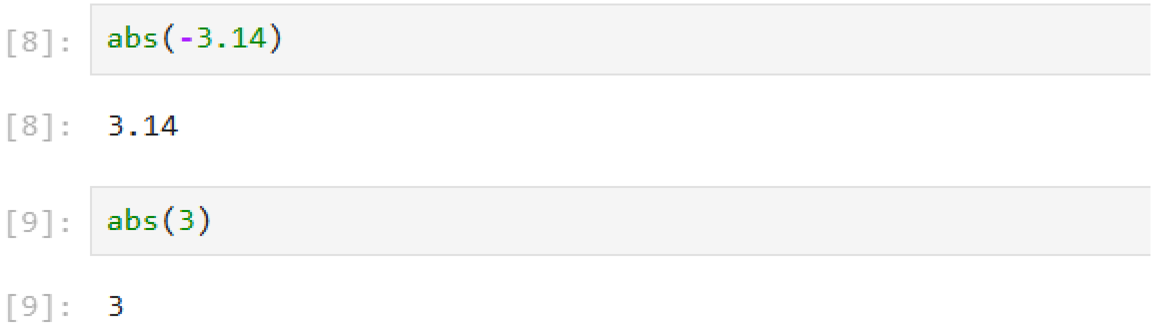
```
[3]: bin(1234)

[3]: '0b10011010010'

[4]: bin(128)

[4]: '0b10000000'

[5]: bin(512)

[5]: '0b1000000000'
```

4. The function pow() takes two arguments, equivalent to x^y. With three arguments it is equivalent to (x^y)%z, but may be more efficient for long integers.



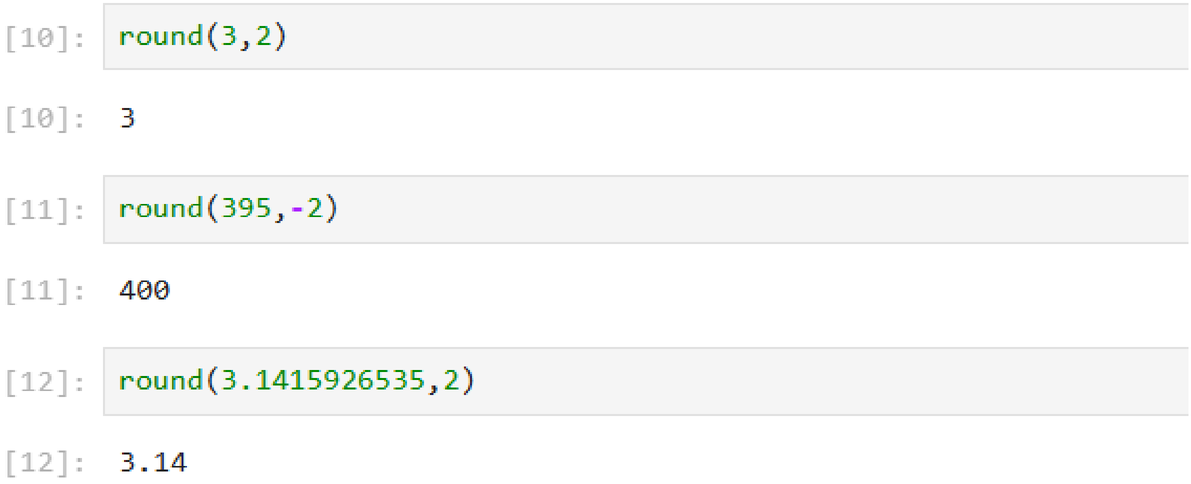
```
[6]: pow(3,4)

[6]: 81

[7]: pow(3,4,5)

[7]: 1
```

5. The function abs() returns the absolute value of a number. The argument may be an integer or a floating-point number. If the argument is a complex number, its magnitude is returned.



```
[8]:  abs(-3.14)

[8]:  3.14

[9]:  abs(3)

[9]:  3
```

6. The function round() will round a number to a given precision in decimal digits (default 0 digits). It does not convert integers to floats.



```
[10]:  round(3,2)

[10]:  3

[11]:  round(395,-2)

[11]:  400

[12]:  round(3.1415926535,2)

[12]:  3.14
```