**Python Math Module Cookbook:**

Basically **math** is a mathematical related library. Below are the functions known to me and used by me. Assuming we have imported the module like **import math**

**Constants:**

* **math.pi** ==> Give the value of [*π*](https://en.wikipedia.org/wiki/Pi_(letter))
* **math.e** ==> Gives Mathematical constant Euler Number value

**Trigonometry:**

* **math.sin(angle\_in\_radians)** ==> Gives the value of sine of Angle
* **math.cos(angle\_in\_radians)** ==> Gives the value of cosine of Angle
* **math.tan(angle\_in\_radians)** ==> Gives the value of tamgent of Angle
* **math.asin(value)** ==> Give the angle of sine inverse of value where value is in [0,1]
* **math.acos(value)** ==> Give the angle of tangent inverse of value
* **math.radians(angle)** ==> Gives the value of angle in radians
* **math. degrees(radians\_value)** ==> Convert radians to Angle

**Logarithmic Functions:**

* **math.exp(value)** ==> Gives the value of ex
* **math.log(x)** ==> Gives value of logex
* **math.log(x,b)** ==> Gives the value logbx
* **math.log10(x)** ==> Gives the value of log10x
* **math.log2(x)** ==> Gives the value of log2x
* **math.pow(x,y)** ==> Gives the value of xy

**General Purpose Functions:**

* **math.ceil(x)** ==> Gives the ceil value of x
* **math.floor(x)** ==> Gives the floor value of x
* **math.trunc(x)** ==> Gives integral part of x
* **math.factorial(positive\_integer\_value\_or\_zero)** ==> Gives the factorial of positive integer or zero
* **math.hypot(a,b)** ==> Gives the hypotenuse of right angled triangle
* **math.sqrt(positive\_integer\_or\_zero)** ==> Gives the Square root of positive integer or zero