Math Module in Python

Math module is a pre-installed package in python. It performs mathematical operations. As math is a pre-installed package, what we do is just import math module as done in the first cell of [Math Module.ipynb](https://github.com/Muhammad-Abdullah3/Practice/blob/master/Python/Math%20Module.ipynb).

Constants of Math:

Following are some mathematical constants we can access with math module in python. They all are accessed as attributes of math module.

**Pi –** The number π is a mathematical constant that is the ratio of a circle's circumference to its diameter, approximately equal to 3.14159.

**Tau** **-** The Greek small letter τ (tau) is used in math as the circle constant to represent a full rotation around a circle in radians. The value of τ is **approximately 6.283.**

**Euler’s Number –** The number e, also known as Euler's number, is a mathematical constant approximately equal to 2.71828 that can be characterized in many ways. It is the base of natural logarithms.

**Infinity** – In python, infinity is treated as a constant and data type of is float.

**NaN –** In python, for values that a non-number value and nan means not a number.

**Arithmetic Functions:**

* Factorial = factorial()
* Ceiling = ceil() function returns the nearest large integer to the value
* Floor = floor() function returns the nearest large integer to the value
* Trunc = trunc() function does ceil() on negative and floor() for positive
* Permutation = perm(n,k)
* Combination = comb(n,k)
* GCD = gcd(n1,n2,….)
* LCM = lcm(n1,n2,….)