Introduction to Basic Arithmetic Operation Using Python.

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The basic arithmetic operations are :

- Addition
- Subtraction
- Multiplication
- Division

Addition yields the total by combining more than one numbers.

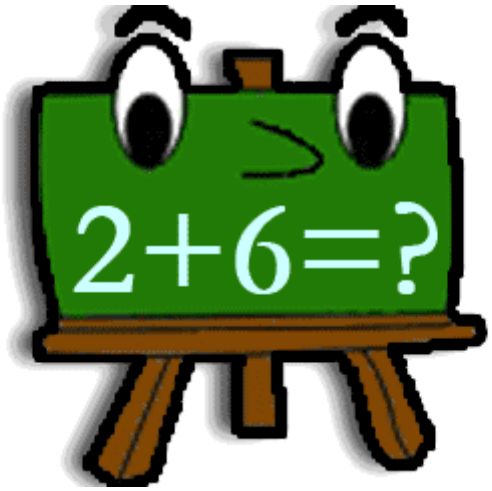

Figure Source : helpfulgames (https://www.helpfulgames.com/bilder/spel/addition.png)

For example: Suppose you have one ball and your friend has given you two more. So how many balls do you have?

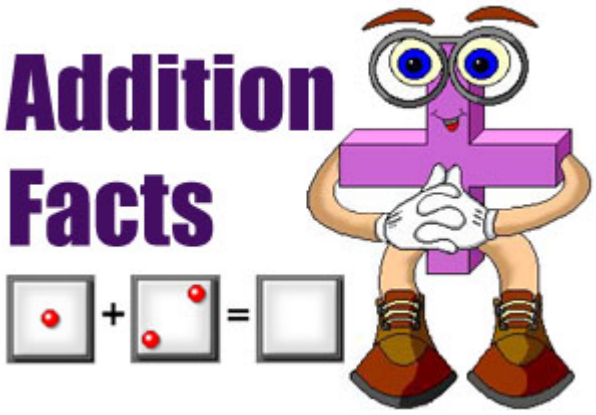

Figure Source : venturaes (https://www.venturaes.com/iosapps/images/title_addition_facts.jpg)

Ans : $\boxed{1+2=3}$.

We can make a function (a user created program) which will take two numbers and give the addition of them.

In [1]:
```
def add_two_numbers(a,b):
    c=a+b
    return c
print (add_two_numbers(1,2))
```

```
3
```

Above, two inputs $\boxed{1}$ & $\boxed{2}$ have been given in a function that is created to add two numbers. And which successfully yields output $\boxed{3}$ as expected.

Let's make another function which will add five numbers.

In [3]:
```
def add_five_numbers(a,b,c,d,e):
    f=a+b+c+d+e
    return f
print (add_five_numbers(1,2,3,4,5))
```

```
15
```

Above, five inputs $\boxed{1}$, $\boxed{2}$, $\boxed{3}$, $\boxed{4}$ & $\boxed{5}$ have been given in a function that is created to add five numbers. And which successfully yields output $\boxed{15}$ as expected.

Subtraction yields the remaining by taking one number away from another.

For example: Suppose you have total five balls. So how many balls do you have after you have given two balls to you friend?

Figure Source : itunes_kids (https://itunes.apple.com/us/app/kids-addition-subtraction/id426907035?mt=8)

Ans: $\boxed{5-2=3}$.

Let's make a function which will take two numbers and give the substraction of second number from the first.

In [3]:
```
def substract_2nd_from_1st_number(a,b):
    c=a-b
    return c
print (substract_2nd_from_1st_number(5,2))
```

```
3
```

Above, two inputs $\boxed{5}$ & $\boxed{2}$ have been given in a function that is created to substract second number $\boxed{2}$ from first number $\boxed{5}$. And which successfully yields output $\boxed{3}$ as expected.

Multiplication = Multiple (Repeated) **Addition**.

For example : $2 + 2 + 2 = 6$, here 2 has been repeated 3 times, so it can be again found by $2 * 3 = 6$.
That's let's say you have given 3 of your friends 2 balls each. How many balls have you given in total?

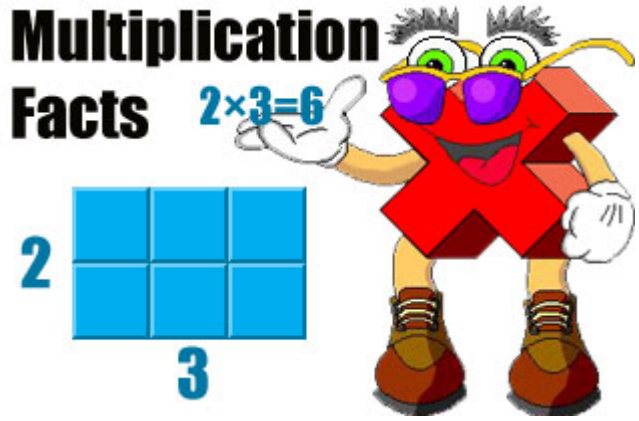

Figure Source : venturaes (https://www.venturaes.com/iosapps/images/title_multiplication_facts.jpg)

Let's make a function which will take two numbers and give the multiplication of them.

In [4]:
```
def multiply_two_numbers(a,b):
    c=a*b
    return c
print (multiply_two_numbers(2,3))
```

```
6
```

Above, two inputs 2 & 3 have been given in a function that is created to multiply two numbers. And which successfully yields output 6 as expected.

Division is breaking a number into certain equal parts.

Figure Source : stonybrook (https://you.stonybrook.edu/murphydivision/vocabulary/)

For example, $\boxed{6 \div 3 = 2}$. Here, $\boxed{6}$ has been splitted into $\boxed{3}$ equal parts of $\boxed{2}$.

Let's make a function which will take two numbers and give the division of second number from the first.

In [6]:
```
def divide_2nd_from_1st_number(a,b):
    c=a/b
    return c
print (divide_2nd_from_1st_number(6,3))
```

```
2.0
```

Above, two inputs 6 & 3 have been given in a function that is created to divide second number 3 from first number 6 . And which successfully yields output 2 as expected.