**import math** : It used to import mathematical calculation

**Using of math function Example**

import math

x = int(input("enert the value: "))

def func(x):

z= math.factorial(x) /2

return z

print(func(x))

**Using of math function in Advance and simple way, Example**

from math import factorial as fac

x = int(input("enert the value: "))

def func(x):

z= fac(x) //2

return z

print(func(x))

**Note**: There is an Interger devision factor we can use dividing **“//”** use this

instead of “/“ both of the works.

Conditions:

If(x>10):

Print(“greater than 10”)

Note: Here we won’t use flower brackets, Instead we uses “**:”, the next line should start after the “4 Spaces”, Its very important.**

**Functions**

In function, when you assign a default argument in the function must be assign at the last, which it should be after the agrgument which are not default.

Example:

Def function(message, border=’\_’):

Border is default Argument here.

ii) By using key word argument you can specify in the any order.

Def function( border=’\_’,message=”hellow world”):

**None is Immutable object in the python, which means it is changale.**

**“Is” operator**

Operator determines the equality of identity, that is two name refer to same object.

**Collections**

**Tuple:**

**Syntax: p=(2,4,kls,32)**

**You can avoid brackets in the tuble when ur using two or more values.**

Is usefull to return multiple values.

The difference between the tuple and list is, tuple uses brackets “()”

**Example:**

Def minmax(items):

Return min(items),max(items)

Tuple unpacking allows us to destructure

**Example:**

**Lower, upper =minmax([67,9,7,534,668])**

**Strings**

‘;’.**join** is used to join the semicolon or something at each word of list items.

Example: cd= ‘;’.join([‘eddd’,’eddse’,’ddcc’])

cd.spli(‘;’) 🡪 this leads to convert back in to list

**Q)** Difference between **split** and **partition**

Split: Cuts of the content where you want split, and gives the result of the rest.

Example: “unoforgetable”.split(“for”)

Output : ungetale

Partition: Is will split in to the three,i.e prefix,superator,suffix. but it gives whole result.

Example: “unoforgetable”.partition(“for”)

Output: un for getable

**Format:**

**‘the age of {0} is {1}’.format(‘santosh’,23)**

**‘the age of {0} is {1} and sai is even {1}’.format(‘santosh’,23)**

**'the age of {} is {}'.format('santosh',32)**

**'the age of {name} is {age}'.format(name='santosh',age=32)**

**Write a program which takes list of items [232,322,883] and show them in the respected format, i.e. the worker of x=232, y=323 and z=883**

**>>> list = [232,222,323]**

**>>> x=list[0]**

**>>> y=list[1]**

**>>> z=list[2]**

**>>> "The age of X={},Y={},Z={}".format(x,y,z)**

**'The age of X=232,Y=222,Z=323'**

**Method –II**

**"the x={huh[0]} and Y={huh[1]} and z={huh[2]}".format(huh=list)**

**'the x=32 and Y=32 and z=433'**