

unit test - 04① pure ( ) :-def add\_time(t<sub>1</sub>, t<sub>2</sub>):

sum = Time()

    sum.hour = t<sub>1</sub>.hour + t<sub>2</sub>.hour    sum.minute = t<sub>1</sub>.minute + t<sub>2</sub>.minute    sum.second = t<sub>1</sub>.second + t<sub>2</sub>.second

return sum

The function creates a new Time object, initializes the attributes, and returns a reference to the new object.

→ This is called pure function because it does not modify any of the objects passed to it as arguments and it has no effect, like displaying a value or getting user input, other than returning a value.

Modifier functions :-

Sometimes it is useful for a function to modify the objects it gets as parameters.

The changes are visible to the caller. Functions that work this way are called modifiers.

def increment(time, seconds):

time.second += seconds

if time.second &gt;= 60: time.second -= 60

time.minute += 1

if time.minute &gt;= 60: time.minute -= 60

time.hour += 1

The init Method :-

It is a special method that gets invoked when an object is instantiated.

Its full name is -- init --

Eg: def \_\_init\_\_(self, hour=0, minute=0, second=0):

self.hour = hour

self.minute = minute

self.second = second

The parameters are optional,

If we provide two arguments, they override hour & time

time = Time(9, 45)

time.print\_time()

O/p: 09:45:00

The \_\_str\_\_ method :-

Special method, like \_\_init\_\_ that is supposed to return a string representing an object.

Eg:

def \_\_str\_\_(self):

return '%d:%d:%d' % (self.hour, self.minute, self.second)

when you print an object, Python invokes the \_\_str\_\_ method:

time = Time(9, 45)

print(time)

09:45:00