1. Class docstring

If someone is going to add the doc string to a class, fist of all it must write the attributes of that class (not arguments) and then he/she must write the methods, with all its arguments (even the self) but without the def prefix. Have in mind that we must write the descriptions in commanding language, like take it, return that etc. also there must be no space after or before the “”” signs.

Have in mind that we do not define the properties here inside the main docstring, instead they will be explained inside their own section. Methods will be explained both here and in their own position.

class Flight:  
 *"""take the data of a flight, such as the flight number, flight origin, flight destination, number of passengers  
 total flight weight, the name of the pilot and the name of the crew members, and display the flight data to the user  
  
 Attributes:  
 number: is the flight number  
 origin: is the city from which the flight has taken of  
 destination: is the city to which the flight will arrive  
 num\_passengers: is the total number of the passengers of the flight  
 total weight: is the total weight of the flight  
 pilot: is the name of the pilot who is in charge of the plane control  
 crew: is the name of the crew of the flight  
  
 Methode:  
 display\_flight\_data(self):  
 return the arguments of the class  
 """*

1. Init method doc string

As any other method, we must write what does it do and the arguments, because methods are like functions, and they have arguments. Instead, class, that was explained above has attributes so attributes must be explained.

def \_\_init\_\_(self, number, origin, destination, num\_passengers, total\_weight, pilot, crew):  
 *"""  
 Arguments:  
 number (integer): it is the flight number, and it is either an integer or a string  
 origin (string): it is the name of the city from which the airplane is taking off  
 destination (string): it is the name of the city from which the airplane is going to land  
 num\_passengers(integer): it is the number of the passengers that the airplane will carry  
 total\_weight (float): it is the total weight of the airplane in kilograms  
 pilot (string) : it is the name of the pilot of the plane  
 crew (list of strings): it is a list containing all crew members' name in the plane  
 """* self.number = number  
 self.origin = origin  
 self.destination = destination  
 self.num\_passengers = num\_passengers  
 self.\_total\_weight = total\_weight  
 self.\_pilot = pilot  
 self.\_crew = crew

1. Properties, especially getters and setters

As said earlier the doc string of the properties are only explained in their own position since they considered not part of the main class somehow. Because they do not add any functionality, or they do not define any attribute. The other important note is that we write the doc string only for the getters and not the setters, when you write the doc string of the getter you automatically define the setter as well. Have in mind that the docstring is written after the def keyword and not after @property.

@property  
def total\_weight(self):  
 *""" Return the total weight of the plane in kilograms  
 it is a float and, sums the weights of that is inclusive to the plane  
 """* return self.\_total\_weight  
  
@total\_weight.setter  
def total\_weight(self, weight):  
 if weight > 0 and isinstance(weight, float):  
 self.\_total\_weight = weight  
  
@property  
def pilot(self):  
 *""" return the name of the pilot  
 it is a string and, it is the name of the person who is piloting the plane from the origin to the destination  
 """* return self.\_pilot  
  
@pilot.setter  
def pilot(self, new\_pilot):  
 self.\_pilot = new\_pilot  
  
@property  
def crew(self):  
 *""" return the names of the crew  
  
 it is a list of strings containing the names of the crew of the flight  
 """* return self.\_crew  
  
@crew.setter  
def crew(self, new\_crew):  
 self.\_crew = new\_crew

1. Methods

As like functions, methods need to be described by their arguments and the value they return (if any) or the values they print.

def display\_flight\_data(self):  
 *""" Print the attributes of the class Flight  
  
 it prints the flight number, the number of passengers, the total weight, the pilot name and the list of crew members  
 """* print("== Flight ==")  
 print("Number:", self.number)  
 print("Number of Passengers:", self.num\_passengers)  
 print("Weight:", self.\_total\_weight)  
 print("Pilot:", self.\_pilot)  
 print("Crew:", self.\_crew)