DAY 17

THE QUIZ PROJECT AND THE BENEFITS OF OOP:

SYNTAX:

class ClassName: #naming of the class name must be a Pascal case in which every word of the name is capitalized.

EXAMPLE:

#class is created  
class User:  
 pass   
#object user\_1 for class User  
user\_1 = User()  
#attributes of the class  
user\_1.id = "001"  
user\_1.user\_name = "pavithra"  
  
print(user\_1.user\_name)

Id and user\_name are attributes.

An attribute is a variable associated with an object. It is almost like creating a variable but it is attached to the object.

#in Python after creating a class or function if nothing inside is defined, it is shown as an error, so we use “pass, “ a keyword.

OUTPUT:

pavithra

CONSTRUCTOR:

EXAMPLE:

Class Car:

def \_\_init\_\_(self):

# initialize attributes

This is a special function that the Python interpreter knows that it is to initialize attributes.

The init function will be called every time we create a new object from the respective class.

class User:  
 def \_\_init\_\_(self):  
 print("new user is created.")  
  
user\_1 = User()  
  
user\_1.id = "001"  
user\_1.user\_name = "pavithra"  
  
user\_2 =User()  
user\_2.id = "002"  
user\_2.user\_name = "darsini"

OUTPUT:

new user is created.

new user is created.

EXAMPLE:

class User:  
 def \_\_init\_\_(self,user\_id,user\_name):  
 self.id = user\_id  
self.username = user\_name  
  
user\_1 = User("001", "pavithra")  
  
print(user\_1.username)  
  
user\_2 =User("002","darsini")  
  
print(user\_2.username)

OUTPUT:

pavithra

darsini

EXAMPLE: WITH DEFAULT VALUES

class User:  
 def \_\_init\_\_(self,user\_id,user\_name):  
 self.id = user\_id  
 self.username = user\_name  
 self.followers = 0  
  
user\_1 = User("001", "pavithra")  
  
user\_2 =User("002","darsini")  
  
print(user\_2.followers)

OUTPUT:

0

EXAMPLE OF ADDING METHOD TO THE CLASS:

class User:  
 def \_\_init\_\_(self,user\_id,user\_name):  
 self.id = user\_id  
 self.username = user\_name  
 self.followers = 0  
 self.following = 0  
  
 def follow(self, user):  
 user.followers += 1  
 self.following += 1  
  
user\_1 = User("001", "pavithra")  
  
user\_2 =User("002","darsini")  
  
user\_1.follow(user\_2)  
print(user\_1.following)  
print(user\_1.followers)