

Encapsulation & Static Keyword in Python Author: Madhu Dadi Tags: python Source: <https://madhudadi.in/blog/posts>

- Two Point objects are created with coordinates (1, 2) and (3, 4) respectively, demonstrating basic object instantiation

Explanation- The code snippet calls the `distancefromorigin()` method on an object `p1`, which is likely an instance of a class.

individual.Explanation- The Person class initializes with two attributes: name and country, set through their init method.

Output[`code block`]Accessing methods of an object in PythonExplanation- The code snippet calls the greet() method

Explanation- The code sets the gender attribute of the object p to the string value 'Male'. - This operation modifies t

and gender. - An instance of the Person class is created and assigned to the variable p, which holds a reference to

- Demonstrates the concept of object references and mutable attribute modification in Python [code block] Output [code block]

- This code demonstrates object-oriented programming by utilizing a class (assumed to be defined elsewhere) to create

that the change persists outside the function.`Output``Object ki mutability`This code demonstr

- Two instances of the Person class are created: p1 with the name 'nitish' from 'india' and p2 with the name 'steve' from 'usa'

operationsExplanation- Defines an Atm class with methods for creating, changing, and checking a PIN, aswell as o

- The absence of parameters in the method call indicates that it may use default values or internal logic to create the

[code block]Implementing a Simple ATM Class with Private Attributes in PythonExplanation- The Atm class simulat

- The method `createpin()` is called on the object `obj`, which likely initializes or generates a pin for the user. - The line

- The double underscore prefix indicates that `balance` is intended to be a private attribute, following Python's name

- The use of a string 'hehehe' suggests that the balance is being set to an invalid or placeholder value, which may lead to a security issue.

checking balance, and withdrawing funds, enhancing user interaction. - Security is enforced by requiring the correct

This code sets the balance of an object to a specified value.Explanation- The method setbalance is called on the o

invalid input or convert it to a numeric value- This pattern shows how object-oriented methods can encapsulate sta

[code block]Output[code block]Creating and accessing a dictionary of custom objects in PythonExplanation- A Pers

A Python ATM Class for Managing User Transactions and PIN Security Explanation- Defines an Atm class that sim

- The Atm class is expected to encapsulate behaviors such as withdrawing cash,checking balance, and depositing

[code block]Understanding the declaration of static variables in Python class definitionsExplanation- Static variable

- Each instance represents an independent object, allowing for separate states and behaviors. - The Atm class must

[code block]Output[code block]This code assigns a string value to a class attribute of the Atm class.Explanation- T

- Defines an Atm class with a static counter to assign unique customer IDs for each instance. - Implements a constructor

console.[code block]Output[code block]Accessing a private variable in a Python class using name manglingExpla

the ATM functionalities.`block`Instantiating an ATM object in Python for financial transactionsExplanation- The

Explanation- The method `getcounter()` is called on an instance of the `Atm` class. - It likely returns the number of transactions.

[code block]Output[code block]Q-2: Create a deck of cards class. Internally, the deck of cards should use another

[code block]Output[code block]Q-3: Find the area of a rectangle.Approach:- The class name should be Rectangle.

Statement: Write a program that uses datetime module within a class. Enter manufacturing date and expiry date of

This Python code defines a Student class with encapsulated attributes and validation methods for age and marks. E

[code block]This Python code defines classes for managing ice cream scoops and bowls, tracking their prices and c

Making advancement in the above classes. Scoop and Bowl1. Introduce a property maxscoops in Bowl class to sig

- The Bowl class manages a collection of Scoop objects, enforcing a maximum scooplmit and tracking the total nu