

Day14: Assignment Questions

1. Understanding OOP Concepts:

- a) Define Object-Oriented Programming (OOP) and explain how it differs from procedural programming.

2. Comparison of Procedural vs. OOP Approach:

- a) Convert the given procedural approach for storing employee details into an OOP-based approach using classes and objects.
- b) Explain the benefits of the OOP approach in this scenario.
- c) Implement the `__str__()` method in your class to return a meaningful string representation of the employee object.

3. Class & Static Methods, Access Modifiers:

- a) Differentiate between instance variables, class variables, and static variables with examples.
- b) Implement a Python class `BankAccount` with a private attribute `__balance` and methods to deposit, withdraw, and check balance. Ensure balance updates only through methods.
- c) Demonstrate the use of a `@classmethod` and `@staticmethod` in a class of your choice.