
Assignment # 6

Question 1: Define Object Oriented Programming Language?

Object Oriented Programming Language is a paradigm in which real-world objects are each viewed as separate entities having their own states which is modified only by built in procedures, called methods.

OR

Object-oriented programming is a programming paradigm based on the concept of "objects", which can contain data, in the form of fields, and code, in the form of procedures.

Examples of object-oriented programming language are:

1. Python
2. Java
3. C++, etc.

Question 2: List down the Benefits of OOP?

1. Reusability of code
2. Recycling of code
3. Maintainability of code
4. Portability
5. Easy to understand
6. Fast development

Question 3: Differentiate between function and method?

Function: A function is a piece of code that is called by name. Python function usually only operates on it, and then prints something or returns a value.

Method: A method is a piece of code that is called by a name that is associated with an object. Python method is called on an object. A method may alter an object's state.

Question 4: Define the following terms:

1. **Class**, 2. **Object**, 3. **Attribute**, 4. **Behavior**

Class: Class is a blue print of an object. In class we define attributes and behavior of an object.

Object: Object is an instance of a class. The object is an entity that has state and behavior. It may be any real-world object like the mouse, keyboard, chair, table, pen, etc.

Attribute: Attributes are the property of an object.

Behavior: Behavior are the functionality of an object.