Advance PHP

Q. What Is Object Oriented Programming?

Ans. **OOP** stands for Object-Oriented Programming.

Procedural programming is about writing procedures or functions that perform operations on the data, while object-oriented programming is about creating objects that contain both data and functions.

**Advantages of OOP:-**

Object-oriented programming has several advantages over procedural programming:

1. OOP is faster and easier to execute.
2. OOP provides a clear structure for the programs.
3. OOP provide securities.
4. OOP helps to keep the PHP code DRY "Don't Repeat Yourself", and makes the code easier to maintain, modify and debug.
5. OOP makes it possible to create full reusable applications with less code and shorter development time

Q. What Are Properties Of Object Oriented Systems?

Ans. Properties of object oriented programming are:

1. Class
2. Object
3. Encapsulation
4. Inheritance
5. Access Modifier
6. Polymorphism

**Class:-**

Making group of data member (variable) and member function that called class

A class is defined by using the class keyword, followed by the name of the class and a pair of curly braces ({}). All its properties and methods go inside the braces.

**Object:-**

Classes are nothing without objects! We can create multiple objects from a class. Each object has all the properties and methods defined in the class, but they will have different property values.

Objects of a class are created using the new keyword.

Object is also known as the instance of the class.

**Encapsulation:-**

OOPs concept of Encapsulation in PHP means, enclosing the internal details of the object to protect from external sources. It describes, combining the class, data variables and member function that work on data together within a single unit to form an object. Otherwise, it’s the bundling of properties and behavior in a single class unit.

Data is not accessed directly, in fact, they are accessed through functions (GET or SET) written inside the class. Attributes are kept private but getter (GET) and setter (SET) methods are kept public for manipulation of these attributes.

**Inheritance:-**

It is a concept of accessing the features of one class from another class.

We can reuse our code by using Inheritance.

Types:

1. Single-level inheritance
2. Multi-level inheritance
3. Multiple inheritance
4. Hierarchical Inheritance
5. Hybrid Inheritance

**Access Modifier:-**

Properties and methods can have access modifiers which control where they can be accessed.

­

Types:

1. Public
2. Private
3. Protected

**Polymorphism:-**

This word is can from Greek word poly and morphism.

Poly means "many" and morphism means “property” which helps us to assign more than one property.

There are two ways to achieve polymorphism in PHP:

1. Overloading
2. Overriding

**Note:**  PHP does not support Overloading

**Q.** What Is Difference Between Class And Interface?

Ans.

1. “Class” keyword is used to create class, while “interface” keyword is used to create interface in PHP.
2. “Extends” keyword is used to inherit a class into another class, while “implements” keyword is used to inherit interface into a class.
3. In PHP, class does not support multiple inheritance and interface supports multiple inheritance.