02) What is OOP? List of Concepts.

* OOP is a Object Oriented Programming it is based on the concept of object.
* OOP approach identifies classes of objects that are closely related to the methods with which they are associated.
* It also covers the concepts of attribute and method inheritance.
* **List of Concepts:**
* **Object:**
* Object is a basic unit of OPP. It is used to assign memory to class.It can be anything.
* **Class:**
* Class is a Template or Blueprint which is collection of data member and member function.
* **Encapsulation:**
* encapsulation describes bundling data and methods that work on that data within one unit.
* Encapsulation is also called data hiding.
* **Inheritance:**
* Inheritance is one of the core feature of OPP. It’s a programming procedure that allow you to reuse code by referencing the behaviors and data of an object.
* A class that inherits from another class shares all the attributes and method of the referenced class.
* **Polymorphism:**
* Polymorphism describes situations in which something occurs in several different forms.
* Polymorphism describes the concept that you can access object of different type through the same interface.

* Abstraction:
* Abstraction main goal is to handle complexity by hiding unnecessary details from user.
* That’s very generic concept that’s not limited to object oriented programming.

**03) Whats is the different between OOP and POP?**

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| oop | pop |
| It is Object Oriented Programming. | It is Structure Oriented Programming. |
| Program is Divided into Object. | Program is Divided into Function. |
| In OOP Inheritance Property is used. | In POP Inheritance is not Allowed. |
| It uses access specifier. | It doesn’t use access specifier. |
| Encapsulation is used to hide the data | No data hiding |
| Concept of virtual function. | No virtual function. |
| Object functions are linked through message passing. | Parts of program are linked through parameter passing. |
| Adding new data and function is easy. | Expanding new data and function is not easy. |
| The existing code can be reused. | No code reusability. |
| Use for solving big problem. | Not suitable for solving big problem. |