2 ) What is OOP? List OOP concepts

Object-oriented programming is a model that provides different types of concepts, such as inheritance, abstraction, polymorphism, etc. These concepts aim to implement real-world entities in programs, and they create working methods and variables to reuse them without compromising security.

OOP concepts:

- Class

- Object

- Inheritance

- Polymorphism

- Encapsulation

- Abstraction

- Dynamic Binding and Message passing

3 ) What is the difference between OOP and POP

| **OOP** | **POP** |
| --- | --- |
| [Object oriented](https://www.geeksforgeeks.org/introduction-of-object-oriented-programming/). | [Structure oriented](https://www.geeksforgeeks.org/difference-between-structured-programming-and-object-oriented-programming/). |
| Program is divided into objects. | Program is divided into functions. |
| Bottom-up approach. | Top-down approach. |
| Inheritance property is used. | 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 functions is easy | Expanding new data and functions is not easy. |
| The existing code can be reused. | No code reusability. |
| use for solving big problems. | Not suitable for solving big problems. |
| [C++](https://www.geeksforgeeks.org/c-plus-plus/), [Java](https://www.geeksforgeeks.org/java/). | [C](https://www.geeksforgeeks.org/c-programming-language/), Pascal. |