Q-1. What is OOP? List OOP concepts.

Ans-1. Objects-oriented programming (OOP): -

Object-oriented programming is a computer programming model that organize software design around data, or object, rather than functions and logic.

2. List of OOPs concepts: -

* Object
* Classes
* Inheritance
* Abstraction
* Encapsulation
* Polymorphism

Q-2. What is the difference between OOP and POP?

Ans- OOP and POP Difference:

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| **Parameters** | **OOP** | **POP** |
| ***Basic Definition*** | OOP is object-oriented. | POP is structure or procedure-oriented. |  |
| ***Program Division*** | The program is divided into objects. | The program is divided into functions. |  |
| ***Approach*** | Bottom-Up approach | Top-down approach |  |
| ***Data Control*** | Data in each object is controlled on its own. | Every function has different data, so there’s no control over it. |  |
| ***Entity Linkage*** | Object functions are linked through message passing. | Parts of a program are linked through parameter passing. |  |
| ***Expansion*** | Adding new data and functions is easy. | Expanding data and function is not easy. |  |
| ***Inheritance*** | Inheritance is supported in three modes: public, private & protected. | Inheritance is not supported. |  |
| ***Access control*** | Access control is done with access modifiers. | No access modifiers supported. |  |
| ***Data Hiding*** | Data can be hidden using Encapsulation. | No data hiding. Data is accessible globally. |  |
| ***Overloading or Polymorphism*** | Overloading functions, constructors, and operators are done. | Overloading is not possible. |  |
| ***Friend function*** | Classes or functions can be linked using the keyword “friend, only in C++. | No friend functions. |  |
| ***Virtual classes or functions*** | The virtual function appears during inheritance. | No virtual classes or functions |  |