2. What is OOP ? List OOP concepts . OOP, function

* The goal of object-oriented programming is to infuse real-world ideas into code, including polymorphism, inheritance, and encapsulation. OOP's main objective is to unite data and the techniques used to manipulate it into a single unit, guaranteeing that the data can only be accessed by these methods and no other portion of the code.

**OOPS Concepts :**

1. Class
2. Objects
3. Data Abstraction
4. Encapsulation
5. Inheritance
6. Polymorphism
7. Dynamic Binding
8. Message passing

3. What is the difference between OOP and POP?

- Two basic programming philosophies that approach software development differently are procedural-oriented programming (POP) and object-oriented programming (OOP).

| **Sr. No.** | **Key** | **OOP** | **POP** |
| --- | --- | --- | --- |
| 1 | Definition | OOP stands for Object Oriented Programing. | POP stands for Procedural Oriented Programming. |
| 2 | Approach | OOP follows bottom up approach. | POP follows top down approach. |
| 3 | Division | A program is divided to objects and their interactions. | A program is divided into funtions and they interacts. |
| 4 | Inheritance supported | Inheritance is supported. | Inheritance is not supported. |
| 5 | Access control | Access control is supported via access modifiers. | No access modifiers are supported. |
| 6 | Data Hiding | Encapsulation is used to hide data. | No data hiding present. Data is globally accessible. |
| 7 | Example | C++, Java | C, Pascal |