* What is OOP? List OOP concept.
* Its stands for Object -Oriented Programming.
* Procedural programming is all about writing procedure or a function that performs operation on the data, while Object Oriented programming is create objects that contains both data and function.
* There are many object-oriented programming languages, including JavaScript, C++, Java and Python.
  + - * Dynamic binding: In dynamic binding, the code to be executed in response to function call is decided at runtime.
      * Class:
* Class is a collection of data member & member function with its behaviour.
* A class is a blueprint or template of an object.
* It is a user-defined data type.
* Inside a class, define variables, constants, member functions and other functionality.
  + - Private
    - Public
    - Protected
* Object:
* An object is an identifiable entity with some characteristic and behaviour.
* It is referred to as an instance of the class.
* It contains member functions, variables that we have defined in class.
* It occupies space in the memory.
* Different objects have different states or attributes and behaviour.
* An object is an instance of a class.
* Encapsulation:
* Encapsulation is one of the key features of object-oriented programming.
* It involves the bundling of data members and functions inside a single class.
* Objects are instances of a class created with specific data.
* Bundling similar data members and functions inside a class together also helps in data hiding.
* Inheritance:
* Property of parent class derived into child class.
* It allows us to create a new class (derived class) from an existing class (base class).

Types:

* Single inheritance: A child class derived from only one base class.
* Multilevel inheritance :   A child class derived from another class, which is itself derived from a base class.
* Multiple inheritance : A child class derived from more than one base class.
* Hybrid inheritance : Formed by combining two or more types of inheritance, creating a blended inheritance structure incorporating diverse inheritance paradigms.
* Hierarchical inheritance : Multiple child classes derived from the same base or parent class.
* Polymorphism :
* It simply means more than one form.
* That is, the same entity (function or operator) behaves differently in different scenarios.
* Overloading
* Overriding
* What is the difference between OOP and POP?

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| --- | --- |
| OOP | POP |
| Object-Oriented Programing | Procedural-Oriented Programing |
| Task done through procedure or structure | Objects are made that inherite the properties of class. |
| Program divided into sections called function. | Program divided into sections called object. |
| No entity access mode | Entity is accessing is categorized in public or private. |
| No provision of  inheritance | Inheritance is present in three forms public, private, protected |