Oop :-

It is a programming approach based on classes & objects.In simple language, oop is a method to represent the "real world entity" in programming.

Oops features:-

1. Class & objects
2. Inheritance
3. Polymorphisms
4. Encapsulation
5. Abstraction

What is class & object?

Class:- Class is a blueprint for an object. Like Real world entity has some properties or behavior which is represented by class variable & method in programming.

Syntax:- class class_name:

        #variable

        #method

Object:-As we know class is a logical entity while an object is a physical or real entity that works on classes data.

Note:-

1. Each object has a distinct role or responsibility.
2. Object creates space on memory as pev class members.

Syntax:- obj_name= class_name()

What is Constructor?

Constructor is a special function that gets automatically called when object of class created.

Syntax:-

```
def __init__(self):
    #code
```

What is default constructor?

Default constructor are also called empty constructor,because it doesn't have any parameter.

Note- If we do not define any constructor,the compiler automatically calls the default constructor.

Syntax:- class class_name:

```
def __init__(self):
    #code
```

What is parametarized constructor?

Parametarized constructor accept arguments along with self,it is known as parametarized constructor.

Syntax:- class class_name:

```
def __init__(self,name):
    #code
```

What is Access Modifiers?

Access Modifiers are used to set the limit of member accessibility.

Type of Access modifiers:-

Public(var),protected(_var),private(__var).

Name	Type	Same class	Same package	Derived class	Other class
Var	public				
_var	Protected				X
__var	Private		X	X	X