**Define Object Oriented Programming Language?**

A computer programming language which deals with objects which contain data.

**List down the Benefits of OOP?**

Objects are reusable and therefore less effort of time and energy. Inheritance a property used for deriving classes from others. Objects can be reused across different applications.

The OOP is very modular i.e. each module can have its own functionality. So not confusing or complicating solutions in one go or module.

Flexibility via Polymorphism i.e. the ability to process objects differently depending on their data type or class.

It helps to solve complex problems by breaking them up in pieces and solving them individually.

**Differentiate between function and method?**

A function is a procedure which takes some input and returns some output value.

A method is like a function, but a method is implicit in its use by an object. A method is accessible data contained in a class.

**Define the following terms:**

1. Class: A class is a blueprint of an object. It defines the behavior of an object and what it will have.

2. Object: It is a self-contained component which has methods and properties. These are used to make the data useful.

3. Attribute: an **attribute** is a specification that defines a property of an object. It may also refer to or set the specific value for a given instance of such.

4. Behavior: An objects behavior is defined by its methods and properties.

**Write a code in python in which create a class named it Car which have 5 attributes such like (model, color and name etc.) and 3 methods. And create 5 object instance from that class**

def \_\_init\_\_(self, model, color, name, make, power ):

self.model = model

self.color = color

self.name = name

self.make = make

self.power = power

def milage(self):

return efficience

def speed(self):

return fast\_access

def steering(self):

return autonomous

porsche\_911 = Car(“Porsche 911”, 3)

Toyota\_gli = Car(“Toyota\_gli”,5)

beatle = Car(“beatle”,6)

jaguar = Car(“jaguar”,2)

bentley = Car(“bentley”,1)