ASSIGNMENT # 6

Question 1: Define Object Oriented Programming Language?

Answer: Object-Oriented Programming is a way of writing computer programs using the idea of objects to represent data and methods. It helps the developer by allowing the code to be easily reused in other parts of the program or even by other people.

Objects, methods, instance, message passing, inheritance are some important properties provided by these particular languages

Question 2: List down the Benefits of OOP?

Answer:

- It makes Programming Easier.
- It makes the code reusable.
- It makes software easier to maintain
- It is good for defining abstract data types.
- OOP breaks down your programming solution into smaller, more manageable chunks.

Question 3: Differentiate between function and method?

Answer: A **function** is a piece of code that is called by name. It can pass data to operate through parameters & arguments, and can optionally return data.

 A **method** is a piece of code that is called by a name that is associated with an **object**.

Question 4: Define the following terms:

1. **Class**

   In object-oriented programming, a class is an extensible program-code-template for creating objects, providing initial values for state

2. **Object**

   An object is a component of a program that knows how to perform certain actions and how to interact with other elements of the program.

3. **Attribute**

   Attributes are data that stored inside a class or instance and represent the state or quality of the class or object. In short, attributes store information about the object.

4. **Behavior**

   Behavior determines that how object of the class will operates or reacts.