**ASSIGNMENT 1**

Q1. What is the purpose of Python’s OOP?

Ans: Python’s OOP concept helps to solve big problems by breaking them into smaller classes and reusing the same classes many times by creating class objects.

Q2. Where does an inheritance search look for an attribute?

Ans: Inheritance search first look for an attribute in the instance then in the classes from bottom to top and then from left to right.

Q3. How do you distinguish between a class object and an instance object?

Ans: Class object is the object created by same functionalities of the class and an instance object is the specific occurrence of the object.

Q4. What makes the first argument in a class’s method function special?

Ans: Class method’s first argument is used to access variables created in the class. Usually, it is denoted with ‘self’ keyword. This makes it special.

Q5. What is the purpose of the \_\_init\_\_ method?

Ans: \_\_init\_\_ is the special method which is used to pass variable values in any class. If a class have \_\_init\_\_ method then when we create an instance of the class it is automatically called assigning the value passed in the instance to the \_\_init\_\_ method arguments.

Q6. What is the process for creating a class instance?

Ans: Class instance is created by assignment expression obj=class(argument), where obj is the name of the instance, class is the name of the class instance is getting created from and argument is any argument accepted by \_\_init\_\_ method present in the class.

Q7. What is the process for creating a class?

Ans: Class is created by using the keyword: Class then class name, for example: Class Class\_name. After that we can create any methods or class variables in the class.

Q8. How would you define the superclasses of a class?

Ans: Superclasses are the parent classes of any class known as child class. Child class will have the same methods, variables and \_\_init\_\_ method unless overwritten in the child class. Any method or variable present in the superclass can be accessed by child class. Syntax for creating child class from super class is as follows:

class Child\_class(Superclass):