Assignment-3

1.What is the concept of an abstract superclass?

Ans: An abstract class can be considered as a blueprint for other classes. It allows you to create a set of methods that must be created within any child classes built from the abstract class. A class which contains one or more abstract methods is called an abstract class.

2.What happens when a class statement's top level contains a basic assignment statement?

Ans: We create and change variables primarily with the assignment statement. This statement provides an expression and a variable name which will be used to label the value of the expression.

variable = expression

For Eg., country- ‘India’

print(country)

output= India

3. Why does a class need to manually call a superclass's \_\_init\_\_ method?

Ans: The main reason for always calling super class\_\_init\_\_ is \_that super class may typically create member variable and initialize them to defaults. So, if you don't call super class init, none of that code would be executed and you would end up with base class that has no member variables.

4. How can you augment, instead of completely replacing, an inherited method?

Ans: A more sophisticated way to augment an inherited method involves forwarding. Message forwarding allows you to augment an inherited method in such a way that it can perform its inherited action and some new action.

5. How is the local scope of a class different from that of a function?

Ans: A variable created inside a function belongs to the local scope of that function, and can only be used inside that function. Whereas the variable  is not available outside the function, but it is available for any function inside the function