**Assignment-3**

Q.1 => What is the concept of an abstract superclass?

**Answer : -**

**A abstract superclass is one-way to provide re-usable code.**

**You can extend the abstract class and inherit the code.**

**The abstract class can “fix” part of code (by making it final).**

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

**Answer :-**

**Top level code means it’s collection of various module and declaration of various variable or entry point of our application.**

**If top level code contain basic assignment statement mean there is some modification in variable declaration or some modification in module defined.**

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

**Answer :-**

**The main reason for calling base class \_\_init\_\_ is that base class may create member variable and initialize to defaults.**

**So if you don’t call the base class \_\_init\_\_ none of the code would be executed.**

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

**Answer : -**

**A more sophisticated way to augment an inherited method involves forwarding.**

**Message forwarding allow you to augment an inherited method in such a way that it can perform its inherited action and some new action.**

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

**Answer :-**

**If you assign value to name inside function then that name will have local space.**

**If you assign value to name outside function then that name will have global space.**