

1. What is the concept of an abstract superclass?

An abstract superclass is one way to provide re-usable code. we can extend the abstract class and inherit the code, so basically it is main class used to create subclasses

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

Variables which are assigned at top level stores the value which are assigned, By default it takes same value before start of execution of classes and subclasses and Modules.

3. Why does a class need to manually call a superclass's `__init__` method?

The main reason for always calling base class `__init__` is that base class may typically create member variable and initialize them to defaults. So if you don't call base 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?

By creating multiple inheritance statements, which replaces parent class

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

Local scope is the scope in which is the particular code is written in for data , i.e The single code pertaining to that particular line of code.

Function is a collection of local scopes.

Ex:

```
Local scope
A={1,2,3,4,5}
A.append(6)
```

Function

```
def append_pop():
```

```
A={1,2,3,4,5}
A.append(6)
A.pop(3)
```