**NameSpace in python**

* A namespace is a unique name for each python object.
* Python itself maintains a namespace in the form of python directories.
* The object might be a variable or the method.

**Ex.-**

* [Namespace example](https://drive.google.com/file/d/1saq0eTyvMqAkeSe0vL7QOfA2JpUn9h77/view?usp=sharing)

**Different types of namespaces are there.**

* Builtin namespace - Global namespace - Local namespace
* Lifetime of the namespace depends on the lifetime of the objects.
* As the Lifetime of the objects ends, the lifetime of the namespace also ends.

**Use of \_\_<name>\_\_ in python class.**

* \_\_name\_\_ is called dunders(double underscores) is used in python methods with leading and trails dunders
* This type of methods are of special type method
* The method which can be use to avoid name conflicts
* The method can be used for operator overloading.
* \_\_class\_\_ is the reference to the current class.

**Explain the library described in the code**.

* Numpy = numpy is a python library, numpy stands for numerical python.

it is used for working with arrays, it also has special function

for working in linear algebra, fourier transform, and matrics.

It is an open source library.

* pdb = pdb is python debugging library

The module pdb defines an interactive source code debugger for Python programs.

It supports setting (conditional) breakpoints and single stepping at the source line level.