

KOLT Python

Python Modules and Third-Party Packages

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Agenda



Python Modules

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- Modules help you to break down large programs into small manageable and organized files
- Modules provides reusability of a code
- Most used functions can be defined in Modules and can be used in other programs without copying the definitions into every program
- To use definitions in modules, modules are needed to be **imported**

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- Packages are organized hierarchically
- Packages can contain subpackages as well as regular modules
- All packages are modules but not all modules are packages

Importing Modules



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with "name"
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from module_name **import** * # all names in module

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Visit pypi.org to explore packages.

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$ pip -V  
pip 20.0.2 from --PATH_TO_PIP-- (python 3.5)
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```
$ pip -V
pip 20.0.2 from --PATH_TO_PIP-- (python 3.5)
$ python -m pip -V
pip 20.0.2 from --PATH_TO_PIP-- (python
version)
```

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Search PyPI for matches:

```
$ pip search query
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Virtual Environments



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What happens if two different programs use the same library?

- We might want to use different versions of the same library.
- Updating a library for **Program A** can harm another **Program B**. (*Breaking Changes*)
- We want **isolation** between programs.

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In Windows: \$ **Scripts\activate**

In Mac/Linux: \$ **source bin/activate**

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Deactivating a virtual environment:

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$ deactivate
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