

## Setting up virtual environments and dependencies in Python 3

Green background represents real, recognized code/commands

### Making a python virtual environment:

```
python3 -m venv <your-environment-name>
```

Example:

```
python3 -m venv test-env
```

### Activating an environment:

Unix/MacOS: `source <your-environment-name>/bin/activate`

Windows: `<your-environment-name>\Scripts\activate.bat`

Example:

```
source test-env/bin/activate
```

or

```
test-env\Scripts\activate.bat
```

### Exiting virtual environment:

`deactivate` or `conda deactivate` (depending on distribution/version installed)

### Installing packages in/for an environment:

Use pip, etc. like you normally would

Example:

```
pip install numpy
```

Viewing installed packages (via pip):

```
pip list
```

Install many (required) packages at once:

```
pip install -r requirements.txt
```

Where requirements.txt contains a list of packages, with specific versions using ==

Example contents:

```
requests==2.7.0
```

```
numpy
```

Export installed packages to requirements.txt:

```
pip freeze > requirements.txt
```