

Python Virtual Environment Setup Guide

1. Create and Activate Virtual Environment:

```
python3 -m venv venv
```

```
source venv/bin/activate # for macOS/Linux
```

```
venv\Scripts\activate # for Windows
```

2. Upgrade pip:

```
pip install --upgrade pip
```

3. Install Required Packages (sample list):

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

4. Package List in venv (captured using `pip list`):

```
acres==0.3.0
annotated-types==0.7.0
anyio==4.9.0
astroid==3.3.9
black==25.1.0
blis==1.3.0
catalogue==2.0.10
certifi==2025.4.26
cfgv==3.4.0
charset-normalizer==3.4.2
ci-info==0.3.0
click==8.1.8
cloudpathlib==0.21.0
confection==0.1.5
configobj==5.0.9
configparser==7.2.0
coverage==7.8.0
cymem==2.0.11
dill==0.4.0
distlib==0.3.9
distro==1.9.0
```

```
en_core_web_sm==3.8.0
etelemetry==0.3.1
exceptiongroup==1.2.2
filelock==3.18.0
flake8==7.2.0
fsspec==2025.3.2
...
wrapt==1.17.2
zipp==3.21.0
```