| **Task** | **Conda package and environment manager command** | **Pip package manager command** | **Virtualenv environment manager command** |
| --- | --- | --- | --- |
| Install a package | conda install $PACKAGE\_NAME | pip install $PACKAGE\_NAME | X |
| Update a package | conda update --name $ENVIRONMENT\_NAME $PACKAGE\_NAME | pip install --upgrade $PACKAGE\_NAME | X |
| Update package manager | conda update conda | Linux/macOS: pip install -U pip Win: python -m pip install -U pip | X |
| Uninstall a package | conda remove --name $ENVIRONMENT\_NAME $PACKAGE\_NAME | pip uninstall $PACKAGE\_NAME | X |
| Create an environment | conda create --name $ENVIRONMENT\_NAME python | X | cd $ENV\_BASE\_DIR; virtualenv $ENVIRONMENT\_NAME |
| Activate an environment | source activate $ENVIRONMENT\_NAME | X | source $ENV\_BASE\_DIR/$ENVIRONMENT\_NAME/bin/activate |
| Deactivate an environment | source deactivate | X | deactivate |
| Search available packages | conda search $SEARCH\_TERM | pip search $SEARCH\_TERM | X |
| Install package from specific source | conda install --channel $URL $PACKAGE\_NAME | pip install --index-url $URL $PACKAGE\_NAME | X |
| List installed packages | conda list --name $ENVIRONMENT\_NAME | pip list | X |
| Create requirements file | conda list --export | pip freeze | X |
| List all environments | conda info --envs | X | Install virtualenv wrapper, then lsvirtualenv |
| Install other package manager | conda install pip | pip install conda | X |
| Install Python | conda install python=x.x | X | X |
| Update Python | conda update python\* | X |  |