

Conda commands

1. List out channels and priorities

```
conda config --show channels

# you can also channels and pre-configure them so you don't have to explicitly mention the channel while creating env
# NOTE: The highest priority channel is where your packages will be installed from no matter if another channel has a higher version!

# You can reset channel priorities by changing the order in this file: ~/.condarc
```

2. List packages you have installed

```
conda list --show-channel-urls
```

3. To search for available versions of a certain package

```
# they have a comprehensive documentation and help available on conda commands
# conda search --help

conda search gatk
conda search picard
conda search fastqc
conda search perl
conda search numpy
```

4. Create two envs with different gatk, perl and picard versions

```
# list envs previously created
conda env list

# Conda has a default environment called base that include a Python installation and some core system libraries and dependencies of Conda.
# It is a "best practice" to avoid installing additional packages into your base software environment.

local versions:
- FastQC v0.11.9
- perl 5.30.3
- picard (not installed locally)

conda create --name env1 picard=3.1.0 perl=5.34.0 fastqc=0.12.1
# conda activate and deactivate

conda create --name env2 picard=3.0.0 perl=5.32.1 fastqc=0.11.2
```

5. Exporting and Sharing the environment.yml file

```
conda env export > ~/Desktop/demo/conda_renv/environment2.yml

# create env using .yaml file
conda env create --file environment.yml
```

.yaml or YAML file is a language that is often used for writing configuration files.