

DUAN CLEYPAL

1. Crie ao menos três ambientes conda

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
(base) duanhubcwb@hub-G3-3590:~$ conda create -n verde
Collecting package metadata (current_repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 4.7.10
  latest version: 4.7.12

Please update conda by running

  $ conda update -n base -c defaults conda

## Package Plan ##

  environment location: /home/duanhubcwb/miniconda3/envs/verde

Proceed ([y]/n)? y
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate verde
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base) duanhubcwb@hub-G3-3590:~$
```

2. Liste os ambientes criados

```
duanhubcwb@hub-G3-3590: ~  
Arquivo Editar Ver Pesquisar Terminal Ajuda  
(base) duanhubcwb@hub-G3-3590:~$ conda env list  
# conda environments:  
#  
base          * /home/duanhubcwb/miniconda3  
azul          /home/duanhubcwb/miniconda3/envs/azul  
branco       /home/duanhubcwb/miniconda3/envs/branco  
verde        /home/duanhubcwb/miniconda3/envs/verde  
vermelho     /home/duanhubcwb/miniconda3/envs/vermelho  
  
(base) duanhubcwb@hub-G3-3590:~$
```

3. Instale ao menos dois pacotes em cada ambiente

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
numpy 1.17.2 py37hf9bf1b6_0 pkgs/main
(azul) duanhubcwb@hub-G3-3590:~$ conda install numpy=1.16.5
Collecting package metadata (current_repodata.json): done
Solving environment: failed with current_repodata.json, will retry with next repodata source.
Collecting package metadata (repodata.json): done
Solving environment: done

==> WARNING: A newer version of conda exists. <==
  current version: 4.7.10
  latest version: 4.7.12

Please update conda by running

  $ conda update -n base -c defaults conda

## Package Plan ##

environment location: /home/duanhubcwb/miniconda3/envs/azul

added / updated specs:
- numpy=1.16.5

The following packages will be downloaded:

package | build | size
-----|-----|-----
numpy-1.16.5 | py37h7e9f1db_0 | 49 KB
numpy-base-1.16.5 | py37hde5b4d6_0 | 4.4 MB
-----|-----|-----
Total: | | 4.4 MB

The following NEW packages will be INSTALLED:

_libgcc_mutex | pkgs/main/linux-64::_libgcc_mutex-0.1-main
blas | pkgs/main/linux-64::blas-1.0-mkl
ca-certificates | pkgs/main/linux-64::ca-certificates-2019.8.28-0
certifi | pkgs/main/linux-64::certifi-2019.9.11-py37_0
intel-openmp | pkgs/main/linux-64::intel-openmp-2019.4-243
```

4. Liste os pacotes de cada ambiente

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
(azul) duanhubcwb@hub-G3-3590:~$ conda list
# packages in environment at /home/duanhubcwb/miniconda3/envs/azul:
#
# Name                      Version                      Build      Channel
_libgcc_mutex               0.1                          main
blas                        1.0                          mkl
ca-certificates             2019.8.28                     0
certifi                     2019.9.11                     py37_0
intel-openmp                2019.4                         243
libedit                     3.1.20181209                 hc058e9b_0
libffi                      3.2.1                         hd88cf55_4
libgcc-ng                   9.1.0                         hdf63c60_0
libgfortran-ng              7.3.0                         hdf63c60_0
libstdcxx-ng                9.1.0                         hdf63c60_0
mkl                         2019.4                         243
mkl-service                 py37he904b0f_0
mkl_fft                     1.0.14                       py37ha843d7b_0
mkl_random                  py37hd6b4f25_0
ncurses                     6.1                           he6710b0_1
numpy                       1.16.5                       py37h7e9f1db_0
numpy-base                  1.16.5                       py37hde5b4d6_0
openssl                     1.1.1d                       h7b6447c_2
pandas                      0.25.1                       py37he6710b0_0
pip                          19.2.3                       py37_0
python                      3.7.4                         h265db76_1
python-dateutil             2.8.0                       py37_0
pytz                        2019.2                       py_0
readline                    7.0                           h7b6447c_5
setuptools                  41.2.0                       py37_0
six                          1.12.0                       py37_0
sqlite                      3.29.0                       h7b6447c_0
tk                           8.6.8                         hbc83047_0
wheel                       0.33.6                       py37_0
xz                          5.2.4                         h14c3975_4
zlib                        1.2.11                       h7b6447c_3
(azul) duanhubcwb@hub-G3-3590:~$
```

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
Verifying transaction: done
Executing transaction: done
(verde) duanhubcwb@hub-G3-3590:~$ conda list
# packages in environment at /home/duanhubcwb/miniconda3/envs/verde:
#
# Name                                Version                                Build                                Channel
_libgcc_mutex                        0.1                                    main
blas                                 1.0                                    mkl
ca-certificates                      2019.8.28                             0
certifi                              2019.9.11                             py37_0
fastcache                            1.1.0                                py37h7b6447c_0
gmp                                  6.1.2                                h6c8ec71_1
gmpy2                                2.0.8                                py37h10f8cd9_2
intel-openmp                         2019.4                                243
libedit                              3.1.20181209                         hc058e9b_0
libffi                               3.2.1                                hd88cf55_4
libgcc-ng                           9.1.0                                hdf63c60_0
libgfortran-ng                      7.3.0                                hdf63c60_0
libstdcxx-ng                        9.1.0                                hdf63c60_0
mkl                                  2019.4                                243
mkl-service                         2.3.0                                py37he904b0f_0
mkl_fft                             1.0.14                               py37ha843d7b_0
mkl_random                          1.1.0                                py37hd6b4f25_0
mpc                                  1.1.0                                h10f8cd9_1
mpfr                                 4.0.1                                hdf1c602_3
mpmath                              1.1.0                                py37_0
ncurses                             6.1                                  he6710b0_1
numpy                                1.17.2                               py37haad9e8e_0
numpy-base                          1.17.2                               py37hde5b4d6_0
openssl                             1.1.1d                               h7b6447c_2
pip                                  19.2.3                               py37_0
python                              3.7.4                                h265db76_1
readline                            7.0                                  h7b6447c_5
scipy                                1.3.1                                py37h7c811a0_0
setuptools                          41.2.0                               py37_0
six                                  1.12.0                               py37_0
sqlite                               3.29.0                               h7b6447c_0
sympy                                1.4                                  py37_0
tk                                   8.6.8                                hbc83047_0
wheel                                0.33.6                               py37_0
xz                                   5.2.4                                h14c3975_4
zlib                                 1.2.11                               h7b6447c_3
(verde) duanhubcwb@hub-G3-3590:~$
```

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
verde /home/duanhubcwb/miniconda3/envs/verde
vermelho * /home/duanhubcwb/miniconda3/envs/vermelho

(vermelho) duanhubcwb@hub-G3-3590:~$ conda list
# packages in environment at /home/duanhubcwb/miniconda3/envs/vermelho:
#
# Name Version Build Channel
_libgcc_mutex 0.1 main
blas 1.0 mkl
ca-certificates 2019.8.28 0
certifi 2019.9.11 py37_0
intel-openmp 2019.4 243
libedit 3.1.20181209 hc058e9b_0
libffi 3.2.1 hd88cf55_4
libgcc-ng 9.1.0 hdf63c60_0
libgfortran-ng 7.3.0 hdf63c60_0
libstdcxx-ng 9.1.0 hdf63c60_0
mkl 2019.4 243
mkl-service 2.3.0 py37he904b0f_0
mkl_fft 1.0.14 py37ha843d7b_0
mkl_random 1.1.0 py37hd6b4f25_0
ncurses 6.1 he6710b0_1
numpy 1.17.2 py37haad9e8e_0
numpy-base 1.17.2 py37hde5b4d6_0
openssl 1.1.1d h7b6447c_2
pandas 0.25.1 py37he6710b0_0
patsy 0.5.1 py37_0
pip 19.2.3 py37_0
python 3.7.4 h265db76_1
python-dateutil 2.8.0 py37_0
pytz 2019.2 py_0
readline 7.0 h7b6447c_5
scipy 1.3.1 py37h7c811a0_0
setuptools 41.2.0 py37_0
six 1.12.0 py37_0
sqlite 3.29.0 h7b6447c_0
statsmodels 0.10.1 py37hdd07704_0
tk 8.6.8 hbc83047_0
wheel 0.33.6 py37_0
xarray 0.13.0 py_0
xz 5.2.4 h14c3975_4
zlib 1.2.11 h7b6447c_3
(vermelho) duanhubcwb@hub-G3-3590:~$
```

5. Apague um dos ambientes

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
(base) duanhubcwb@hub-G3-3590:~$ conda env remove -n branco

Remove all packages in environment /home/duanhubcwb/miniconda3/envs/branco:

(base) duanhubcwb@hub-G3-3590:~$ conda env list
# conda environments:
#
base                *  /home/duanhubcwb/miniconda3
azul                 /home/duanhubcwb/miniconda3/envs/azul
verde                /home/duanhubcwb/miniconda3/envs/verde
vermelho             /home/duanhubcwb/miniconda3/envs/vermelho

(base) duanhubcwb@hub-G3-3590:~$
```

6. O pacote Rstudio está presente no canal conda-forge?

```
duanhubcwb@hub-G3-3590: ~
Arquivo Editar Ver Pesquisar Terminal Ajuda
(base) duanhubcwb@hub-G3-3590:~$ conda search Rstudio --channel conda-forge
Loading channels: done
# Name                               Version           Build    Channel
rstudio                             1.0.44            0        pkgs/r
rstudio                             1.0.136           1        pkgs/r
rstudio                             1.0.153           1        pkgs/r
rstudio                             1.1.383           h2c9cdda_2 pkgs/r
rstudio                             1.1.456           h6bb024c_1 pkgs/r
(base) duanhubcwb@hub-G3-3590:~$
```

Nao!

7. Quais as dependências instaladas após instalar o python?

```
(cinza) duanhubcwb@hub-G3-3590:~$ conda list
# packages in environment at /home/duanhubcwb/miniconda3/envs/cinza:
#
# Name                                Version                                Build      Channel
_libgcc_mutex                         0.1                                    main
ca-certificates                      2019.8.28                             0
certifi                              2019.9.11                             py37_0
libedit                              3.1.20181209                          hc058e9b_0
libffi                                3.2.1                                  hd88cf55_4
libgcc-ng                             9.1.0                                  hdf63c60_0
libstdcxx-ng                         9.1.0                                  hdf63c60_0
ncurses                              6.1                                    he6710b0_1
openssl                              1.1.1d                                h7b6447c_2
pip                                  19.2.3                                py37_0
python                               3.7.4                                  h265db76_1
readline                             7.0                                    h7b6447c_5
setuptools                           41.2.0                                py37_0
sqlite                                3.29.0                                h7b6447c_0
tk                                    8.6.8                                  hbc83047_0
wheel                                 0.33.6                                py37_0
xz                                    5.2.4                                  h14c3975_4
zlib                                  1.2.11                                h7b6447c_3
(cinza) duanhubcwb@hub-G3-3590:~$
```

8. Instale o pacote Pandas pelo pip

```
(base) duanhubcwb@hub-G3-3590:~$ pip install pandas
Collecting pandas
  Downloading https://files.pythonhosted.org/packages/7e/ab/ea76361f9d3e732e114a
dcd801d2820d5319c23d0ac5482fa3b412db217e/pandas-0.25.1-cp37-cp37m-manylinux1_x86
_64.whl (10.4MB)
  |████████████████████████████████████████| 10.4MB 11.2MB/s
Collecting numpy>=1.13.3 (from pandas)
  Downloading https://files.pythonhosted.org/packages/ba/e0/46e2f0540370f2661b04
4647fa447fef2ecbcc8f7cdb4329ca2feb03fb23/numpy-1.17.2-cp37-cp37m-manylinux1_x86_
64.whl (20.3MB)
  |████████████████████████████████████████| 20.3MB 5.8MB/s
Collecting python-dateutil>=2.6.1 (from pandas)
  Downloading https://files.pythonhosted.org/packages/41/17/c62facbfbfd163c7f57f
3844689e3a78bae1f403648a6afb1d0866d87fbb/python_dateutil-2.8.0-py2.py3-none-any.
whl (226kB)
  |████████████████████████████████████████| 235kB 2.5MB/s
Collecting pytz>=2017.2 (from pandas)
  Downloading https://files.pythonhosted.org/packages/87/76/46d697698a143e05f77b
ec5a526bf4e56a0be61d63425b68f4ba553b51f2/pytz-2019.2-py2.py3-none-any.whl (508kB
)
  |████████████████████████████████████████| 512kB 4.1MB/s
Requirement already satisfied: six>=1.5 in ./miniconda3/lib/python3.7/site-packa
ges (from python-dateutil>=2.6.1->pandas) (1.12.0)
Installing collected packages: numpy, python-dateutil, pytz, pandas
Successfully installed numpy-1.17.2 pandas-0.25.1 python-dateutil-2.8.0 pytz-201
9.2
```

9. Monte um ambiente conda novo com python versão 3 Execute o comando python para entrar no interpretador python A partir do interpretador execute o comando print "teste" Após terminar a execução execute ctrl+d para sair do interpretador Qual é o erro apresentado? O que deve ser feito para o print funcionar? Verifique se o mesmo comando apresenta erro no python 2

Python3 exige o formato print(""), onde a string deve estar dentro de parênteses e aspas duplas. Python2 aceita o mesmo formato de python3, além do formato print "", onde os parênteses são dispensáveis.

10. Exporte um dos ambientes criados e passe por email para todos os alunos

```
(base) duanhubcwb@hub-G3-3590:~$ conda env list
# conda environments:
#
base                *  /home/duanhubcwb/miniconda3
azul                 /home/duanhubcwb/miniconda3/envs/azul
laranja             /home/duanhubcwb/miniconda3/envs/laranja
verde               /home/duanhubcwb/miniconda3/envs/verde
vermelho            /home/duanhubcwb/miniconda3/envs/vermelho

(base) duanhubcwb@hub-G3-3590:~$ conda-env export -n azul -f ambienteAzul.yml
(base) duanhubcwb@hub-G3-3590:~$ ls
'=' Documentos      fiepenv.yml      Modelos      Vídeos
ambienteAzul.yml  Downloads        Imagens       Música
'Área de Trabalho' examples.desktop  miniconda3    Público
(base) duanhubcwb@hub-G3-3590:~$ clear
```

11. Escolha um dos ambientes enviados e monte no seu computador

```
(base) duanhubcwb@hub-G3-3590:~$ conda env create -f t1.yml
Collecting package metadata (repodata.json): done
Solving environment: done
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate c2
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base) duanhubcwb@hub-G3-3590:~$ conda env list
# conda environments:
#
base                *  /home/duanhubcwb/miniconda3
azul                 /home/duanhubcwb/miniconda3/envs/azul
c2                  /home/duanhubcwb/miniconda3/envs/c2
verde               /home/duanhubcwb/miniconda3/envs/verde
vermelho            /home/duanhubcwb/miniconda3/envs/vermelho
```