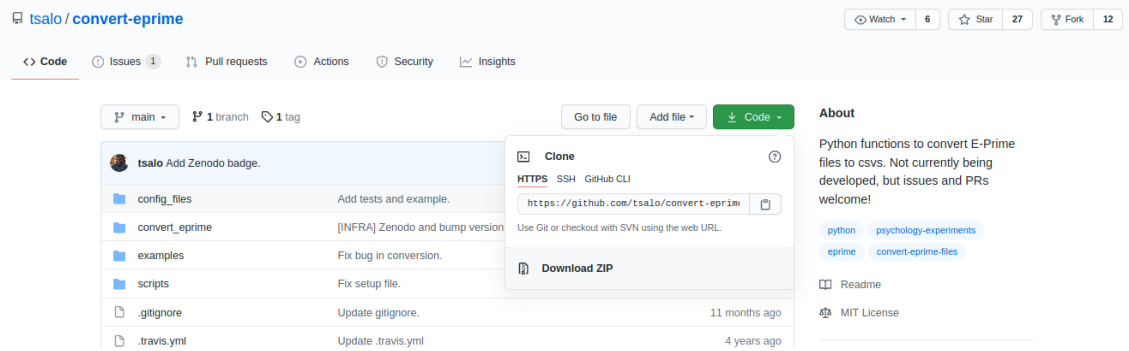
ePRIME .txt to .csv converter

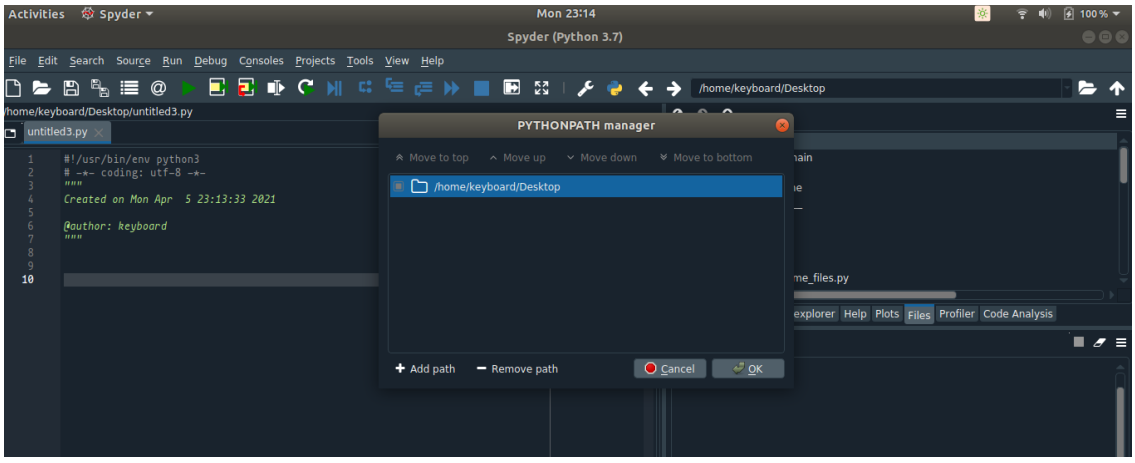
- ePRIME spits out an edat file once the paradigm successfully exits. It also generates a .txt file. If paradigm stops (for numerous reasons), we end up with a .txt file. .edat files can be exported manually (one by one, till all our hairs turn white) to csv or tab separated formats. At times these files need some extra pre-processing to work!
- Taylor Salo wrote a neat converter using python 🐍 to do these conversions
- This is very useful to extract metadata which can be used for behavioural data analysis (Reaction time, accuracy etc.), marker extraction and lot more

Below is a short tutorial on doing bulk conversions

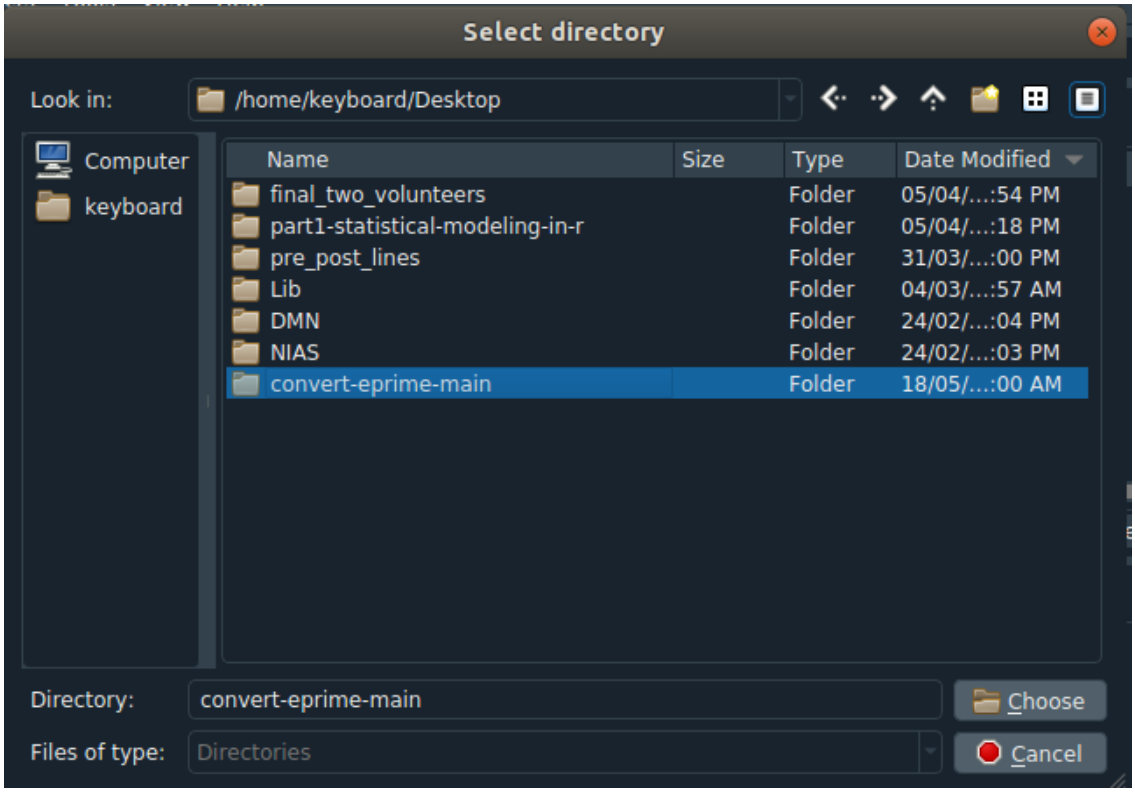
1. Download the repository convert-eprime



2. Extract the zipped folder to some location in your system
3. Open spyder 🕸 and click ➕ Add path from PYTHONPATH manager



4. Navigate to the unzipped folder and **choose** the convert-eprime-main folder



5. Now, we are set to convert the files to .csv. Code snipped is below

```
from convert_eprime.convert import text_to_csv
in_file = 'subj0001_stop_signal_task-0.txt'
out_file = 'subj0001_0.csv'

text_to_csv(in_file, out_file)
# The converted .csv file will be available in the same
folder/directory from which we ran the script
```

- **The text file and the converted .csv file**

```
*** LogFrame Start ***
Procedure: PracticeProc
faceabsent: 26
imageabsent: faa26
sounddist: 1
sounddistfile: std
alternatestim: 1
stimoption: cb
left: faa26
right: cb
response: 1
visualdistcondition: top
visualdistmarker: 253
stimcondition: LeftFaceAbsentFreq
stimmarker: 118
corollarycondition: cdon
corollarymarker: 246
corollaryfile: corollary
alternatesound: 1
soundpresent: std
sounddistmarker: 220
PracticeListWhodunnit: 1
CellNumber: 2
leftfaceCDpractice: 1
CD: 1
Running: PracticeListWhodunnit
PracticeListWhodunnit.Cycle: 1
PracticeListWhodunnit.Sample: 1
TotalTrialDuration: 1591
ResponseDuration: 700
PreStimDuration: 600
PreStim1Duration: 386
PreStim2Duration: 120
```

Converted .csv file

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Procedure	faceabsent	imageabsent	sounddist	sounddistfile	alternatestim	stimoption	left	right	response	visualdistcondition	visualdistmarker	stimcondition	stimmarker	corollarycondit
2	PracticeProc	26	faa26	1	std	1	cb	faa26	cb	1	top	253	LeftFaceAbsentFreq	118	cdon
3	PracticeProc	28	faa28	2	blank	1	cb	faa28	cb	1	top	253	LeftFaceAbsentFreq	118	cdon
4	PracticeProc	3	faa03	2	blank	1	cb	faa03	cb	1	top	253	LeftFaceAbsentFreq	118	nocd
5	PracticeProc	11	faa11	1	std	1	cb	faa11	cb	1	top	253	LeftFaceAbsentFreq	118	cdoff
6	PracticeProc	21	faa21	2	blank	1	cb	faa21	cb	1	top	253	LeftFaceAbsentFreq	118	nocd
7	PracticeProc	19	faa19	2	blank	1	cb	cb	faa19	5	bottom	254	RightFaceAbsentRare	127	cdon
8	PracticeProc	23	faa23	1	std	1	cb	faa23	cb	1	top	253	LeftFaceAbsentFreq	118	cdoff
9	PracticeProc	29	faa29	2	blank	1	cb	faa29	cb	1	top	253	LeftFaceAbsentFreq	118	cdon
10	PracticeProc	12	faa12	2	blank	1	cb	faa12	cb	1	top	253	LeftFaceAbsentFreq	118	nocd
11	PracticeProc	2	faa02	1	deviant	1	cb	faa02	cb	1	top	253	LeftFaceAbsentFreq	118	cdoff
12	PracticeProc			2	blank						gray	219	baseline	250	baseline
13	PracticeProc			2	blank						gray	219	baseline	250	baseline
14	PracticeProc			1	std						gray	219	baseline	250	baseline
15	PracticeWhodunnit														
16	TrialProc			2	blank	1	cb	fpa18	cb	1	top	253	LeftFacePresentFreq	116	cdon
17	TrialProc			2	blank	1	cb	fpa15	cb	1	top	253	LeftFacePresentFreq	116	cdon
18	TrialProc			1	std	1	cb	fpa22	cb	1	top	253	LeftFacePresentFreq	116	nocd
19	TrialProc			2	blank	1	cb	fpa09	cb	1	top	253	LeftFacePresentFreq	116	cdon
20	TrialProc	30	faa30	2	blank	1	cb	cb	faa30	5	bottom	254	RightFaceAbsentRare	127	cdon
21	TrialProc			1	deviant	1	cb	fpa23	cb	1	bottom	254	LeftFacePresentFreq	116	cdoff
22	TrialProc			2	blank	1	cb	fpa17	cb	1	bottom	254	LeftFacePresentFreq	116	nocd
23	TrialProc			2	blank	1	cb	fpa02	cb	1	bottom	254	LeftFacePresentFreq	116	cdon
24	TrialProc			1	std	1	cb	fpa10	cb	1	bottom	254	LeftFacePresentFreq	116	cdon
25	TrialProc			2	blank	1	cb	fpa01	cb	1	bottom	254	LeftFacePresentFreq	116	cdoff
26	TrialProc			2	blank	1	cb	cb	fpa06	5	bottom	254	RightFacePresentRare	125	cdon
27	TrialProc			1	deviant	1	cb	fpa14	cb	1	top	253	LeftFacePresentFreq	116	cdon
28	TrialProc			2	blank	1	cb	fpa28	cb	1	top	253	LeftFacePresentFreq	116	nocd
29	TrialProc			2	blank	1	cb	fpa19	cb	1	top	253	LeftFacePresentFreq	116	cdoff
30	TrialProc			1	std	1	cb	fpa04	cb	1	top	253	LeftFacePresentFreq	116	nocd

- **We can subset this one to get trial accuracy and reaction times using R/Python**

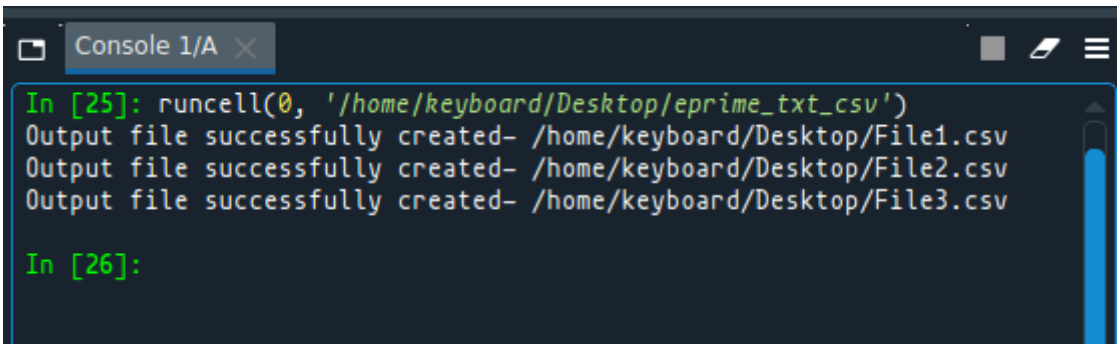
- **The code snippet below is a wrapper to do bulk conversion of text files generated by ePRIME. Same filename is borrowed for .csv files!**

```
#!/usr/bin/env python3
# -*- coding: utf-8 -*-
"""
Created on Mon Apr  5 23:18:10 2021
@author: Rahul Venugopal
Just a wrapper to automate bulk converting .txt files to .csv
files
"""
# Loading library
from convert_eprime.convert import text_to_csv
from tkinter.filedialog import askopenfilenames
from tkinter import Tk
Tk().withdraw() # we don't want a full GUI, so keep the root
window from appearing

# Selecting multiple text files using GUI
filelist = askopenfilenames(initialdir = "cwd",title = "Select
file",
                            filetypes = (("Text
file","*.txt"),
                                         ("All files","*.*")))

for file in filelist:
    in_file = file
    out_file = in_file[0:-3]+str('csv')
    text_to_csv(in_file, out_file)
```

Just run the code, select multiple text files and press **OK**



Fin.