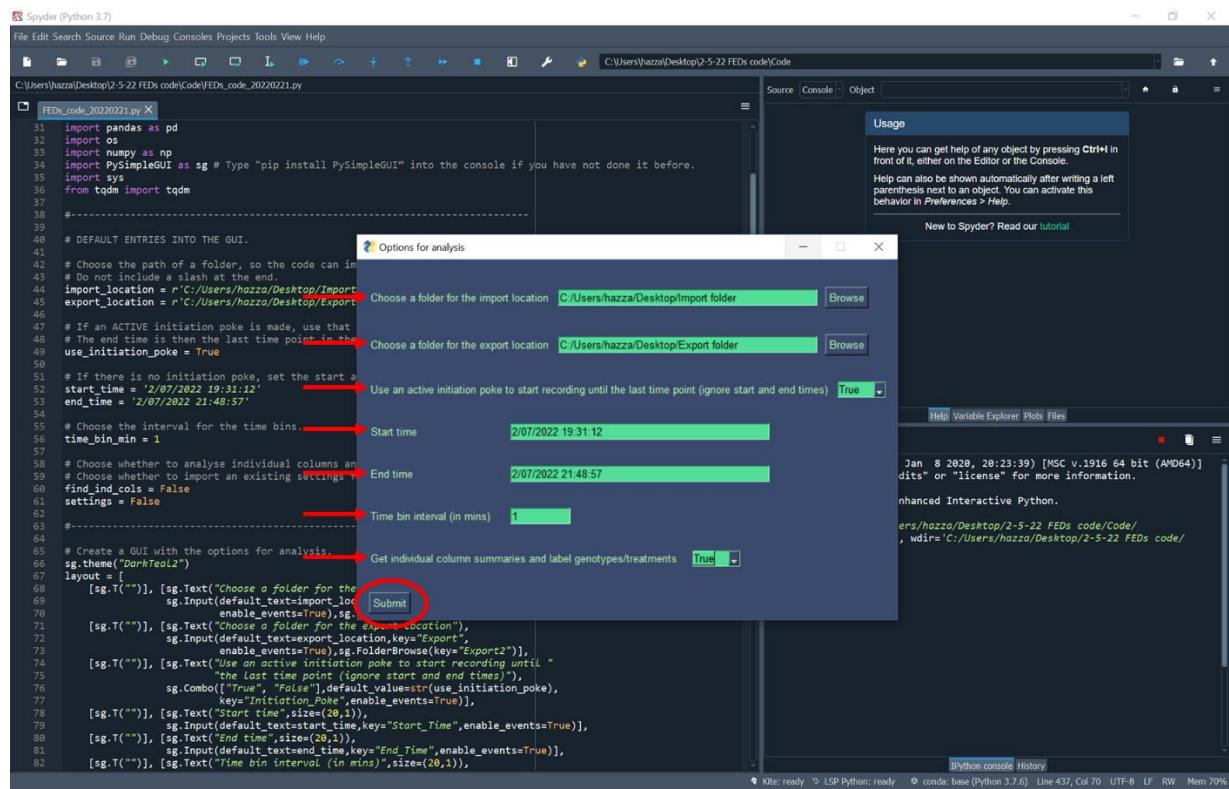


Guide to the FED code

Purpose: the CSV output from the FED shows the timestamps of each event, like a nose poke or pellet retrieval. This code:

- Converts this output into a time binned file. It also adds another sheet with the time stamps of all pellet count changes.
- Creates a master file that combines all the “Left poke count” columns from the raw FED files into one sheet. It does the same thing for the other column types as well. The columns are then sorted by genotype and treatment.

1. Select all the options for time bins analysis and click “submit”. Here is an explanation of all the options:

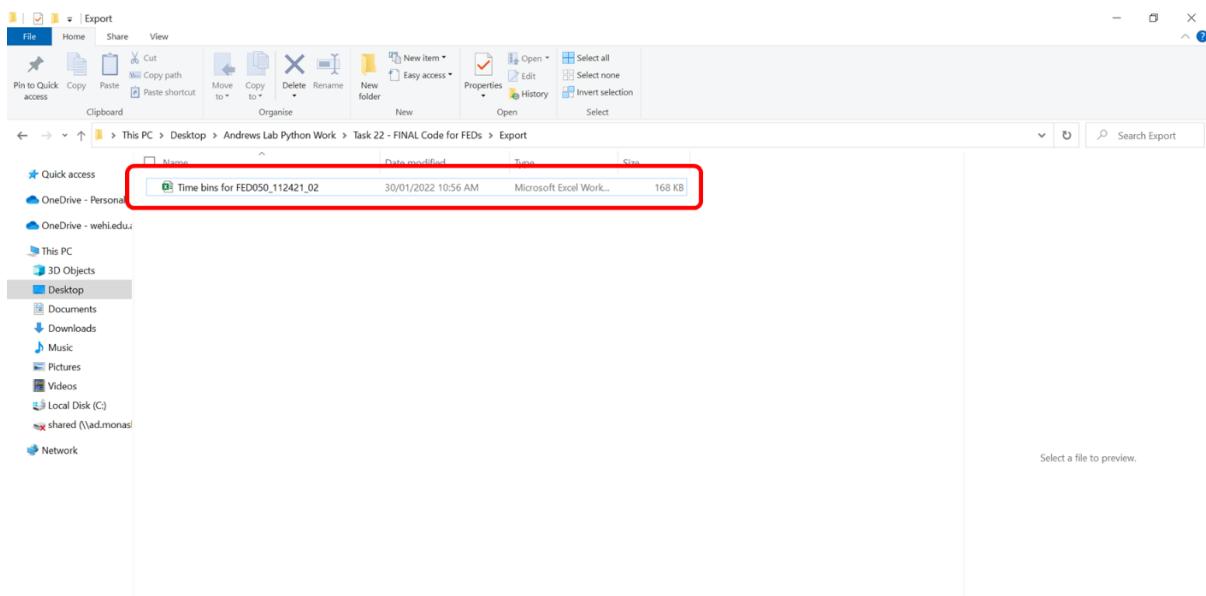


- **Import location:** the import location is a folder that contains the raw FEDs data. The code will analyse each CSV file in the folder.
- **Export location:** the export location is a folder for the time binned files.
- **Use active initiation poke:** there is an option to use an active initiation poke for the start time and the last time point for the end time. If this option is set to true, the times will be found using the method below:

	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
1	MM:DD:YYYY hh:mm:ss	Device_Number	Battery_Voltage				Active_Poke	Left_Poke_Count	Count	Retrieval_Time						
2	6/28/2021 13:21:18	13	4.14				Left	0	0	nan						
3	6/28/2021 14:18:17	13	4.13				Left	0	0	nan						
4	6/28/2021 14:25:23	13	4.13	0	1 Poke	Left	0	0	1	nan						
5	6/28/2021 14:36:49	13	4.12	0	1 Poke	Left	0	0	1	nan						
6	6/28/2021 14:41:02	13	4.12	0	1 Poke	Left	1	1	2	nan						
7	Use this time point as the start time	13	4.13	0	1 Poke	Left	2	2	3	nan						
8		13	4.09	1	1 Pellet	Left	2	2	3	30						
9		13	4.12	0	1 Poke	Left	2	2	4	2 nan						
10	6/28/2021 15:10:01	13	4.12	0	1 Poke	Left	3	3	4	2 nan						
11	6/28/2021 15:08:08	13	4.09	1	1 Pellet	Left	3	3	4	3	5					
12	6/28/2021 15:35	13	4.11	0	1 Poke	Left	3	3	5	3 nan						
13	6/28/2021 15:57	13	4.11	0	1 Poke	Left	3	3	6	3 nan						
14	6/28/2021 15:28:45	13	4.12	0	1 Poke	Left	4	4	6	3 nan						
15	6/28/2021 15:28:49	13	4.1	1	1 Pellet	Left	4	4	6	4	2					
16	6/28/2021 15:31:38	13	4.12	0	1 Poke	Left	4	4	7	4 nan						
17	6/28/2021 15:33:17	13	4.11	0	1 Poke	Left	5	5	7	4 nan						
18	6/28/2021 15:33:21	13	4.1	1	1 Pellet	Left	5	5	7	5	2					
19	6/28/2021 15:36:53	13	4.12	0	1 Poke	Left	5	5	8	5 nan						
20	6/28/2021 15:46:59	13	4.11	0	1 Poke	Left	5	5	9	5 nan						
21	6/28/2021 15:47:04	13	4.11	0	1 Poke	Left	5	5	10	5 nan						
22	6/28/2021 15:47:32	13	4.11	0	1 Poke	Left	6	6	10	5 nan						
23	6/28/2021 15:47:47	13	4.08	2	1 Pellet	Left	6	6	10	6	12					
24	6/28/2021 15:56:31	13	4.11	0	1 Poke	Left	7	7	10	6 nan						
25	6/28/2021 15:56:35	13	4.09	1	1 Pellet	Left	7	7	10	7	2					
26	6/28/2021 16:00:16	13	4.11	0	1 Poke	Left	8	8	10	7 nan						
	Use the last time point present for the end time	13	4.09	1	1 Pellet	Left	8	8	10	8	2					
		13	4.11	0	1 Poke	Left	9	9	10	8 nan						
		13	4.07	1	1 Pellet	Left	9	9	10	9	2					
		13	4.11	0	1 Poke	Left	9	9	11	9 nan						
		13	4.11	0	1 Poke	Left	10	10	11	9 nan						
		13	4.09	1	1 Pellet	Left	10	10	11	10	1					
		13	4.11	0	1 Poke	Left	11	11	11	10 nan						
		13	4.09	1	1 Pellet	Left	11	11	11	11	1					
	6/28/2021 16:09:17	13	4.09	1	1 Pellet	Left	10	11	10	10	1					
	6/28/2021 16:12:44	13	4.11	0	1 Poke	Left	11	11	11	10 nan						
	6/28/2021 16:12:48	13	4.09	1	1 Pellet	Left	11	11	11	11	1					
	FED013_062821_00															

- Start and end times:** if the above option is set to ‘False’, the start and end times can be entered manually. The time points from the raw data CSV file above can be copied directly.
- Time bin interval (mins):** the time bin length can be any whole number or decimal in minutes.
- Get individual column summaries:** make a master excel file that combines the data for each column across many files. The sheets are “left poke count”, “right poke count”, ... See step 9 onwards for an explanation of this option.

2. Go to the export location to find the time binned file.



3. Here is the exported data.

- The time bins 0, 1, 2, ... refer to $t = 0$ mins, $0 < t \leq 1$ mins, $1 < t \leq 2$ mins, ... These are the rows in yellow. The sheet **Time bins** only contains these rows.
- Whenever a pellet count changes, the exact time point is shown as a decimal. The time points 4.28, 4.3, 4.33, ... refer to $t = 4.28$ mins, $t = 4.3$ mins, $t = 4.33$ mins, ... These rows are shown in red and the sheet **Pellet count changes** only contains these rows.
- The sheet **All data** contains the rows from both these sheets together.

All data sheet

Screenshot of an Excel spreadsheet titled "All data sheet". The spreadsheet displays a large dataset of experimental data. The columns represent various parameters: Date, Time, Time bins (mins), Library Version, Session Type, Motor Turns, FR, Left Poke Count, Right Poke Count, Pellet Count, Pellet Count Change, Block Pellet Count, Retrieval Time, Interpellet Interval, and Poke Time. The data spans from November 24, 2021, to November 24, 2021, with many rows colored yellow or red, indicating specific experimental events. The bottom of the spreadsheet shows tabs for "All data" (selected), "Time bins", and "Pellet count changes".

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Date	Time	Time bins (mins)	Library Version	Session Type	Motor Turns	FR	Left Poke Count	Right Poke Count	Pellet Count	Pellet Count Change	Block Pellet Count	Retrieval Time	Interpellet Interval	Poke Time			
2	2021-11-24	11:55:20	0	1.11.0	Free_feed	1	0	0	0	1	1	0	4.55	0	0	0	0	
3	2021-11-24	11:56:20	1	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	0	0	
4	2021-11-24	11:57:20	2	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	0	0	
5	2021-11-24	11:58:20	3	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	0	0	
6	2021-11-24	11:59:20	4	1.11.0	Free_feed	0	0	0	0	1	0	0	0	0	0	0	0	
7	2021-11-24	11:59:37	4.283333333	1.11.0	Free_feed	2	0	0	0	2	1	0	60	257	0	0	0	
8	2021-11-24	11:59:38	4.3	1.11.0	Free_feed	1	0	0	0	3	1	0	0.18	1	0	0	0	
9	2021-11-24	11:59:40	4.333333333	1.11.0	Free_feed	1	0	0	0	4	1	0	0.18	2	0	0	0	
10	2021-11-24	11:59:44	4.4	1.11.0	Free_feed	1	0	0	0	5	1	0	2.65	4	0	0	0	
11	2021-11-24	11:59:45	4.416666667	1.11.0	Free_feed	1	0	0	0	6	1	0	0.18	1	0	0	0	
12	2021-11-24	11:59:46	4.433333333	1.11.0	Free_feed	1	0	0	0	7	1	0	0.44	1	0	0	0	
13	2021-11-24	12:00:20	5	1.11.0	Free_feed	1	0	0	0	7	0	0	0.44	1	0	0	0	
14	2021-11-24	12:01:20	6	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	0	0	
15	2021-11-24	12:02:20	7	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	0	0	
16	2021-11-24	12:03:20	8	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	0	0	
17	2021-11-24	12:04:20	9	1.11.0	Free_feed	0	0	0	0	7	0	0	0	1	0	0	0	
18	2021-11-24	12:05:20	10	1.11.0	Free_feed	0	0	0	0	7	0	0	0	0	1	0	0	
19	2021-11-24	12:06:20	11	1.11.0	Free_feed	0	0	0	0	7	0	0	0	0	1	0	0	
20	2021-11-24	12:07:20	12	1.11.0	Free_feed	0	0	0	0	7	0	0	0	0	1	0	0	
21	2021-11-24	12:07:30	12.166666667	1.11.0	Free_feed	1	0	0	0	8	1	0	60	464	0	0	0	
22	2021-11-24	12:07:36	12.266666667	1.11.0	Free_feed	1	0	0	0	9	1	0	5.31	6	0	0	0	
23	2021-11-24	12:07:38	12.3	1.11.0	Free_feed	1	0	0	0	10	1	0	0.88	2	0	0	0	
24	2021-11-24	12:08:20	13	1.11.0	Free_feed	1	0	0	0	10	0	0	0.88	2	0	0	0	
25	2021-11-24	12:09:20	14	1.11.0	Free_feed	0	0	0	0	10	0	0	0	2	0	0	0	
26	2021-11-24	12:10:20	15	1.11.0	Free_feed	0	0	0	0	10	0	0	0	2	0	0	0	
27	2021-11-24	12:11:14	15.9	1.11.0	Free_feed	1	0	0	0	11	1	0	60	216	0	0	0	
28	2021-11-24	12:11:20	16	1.11.0	Free_feed	1	0	0	0	11	0	0	60	216	0	0	0	
29	2021-11-24	12:12:20	17	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	0	0	
30	2021-11-24	12:13:20	18	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	0	0	
31	2021-11-24	12:14:20	19	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	0	0	
32	2021-11-24	12:15:20	20	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	0	0	
33	2021-11-24	12:16:20	21	1.11.0	Free_feed	0	0	0	0	11	0	0	0	216	0	0	0	
34	2021-11-24	12:16:29	21.15	1.11.0	Free_feed	1	0	0	0	12	1	0	60	315	0	0	0	

Time bins sheet

Time bins for FED050_112421_02

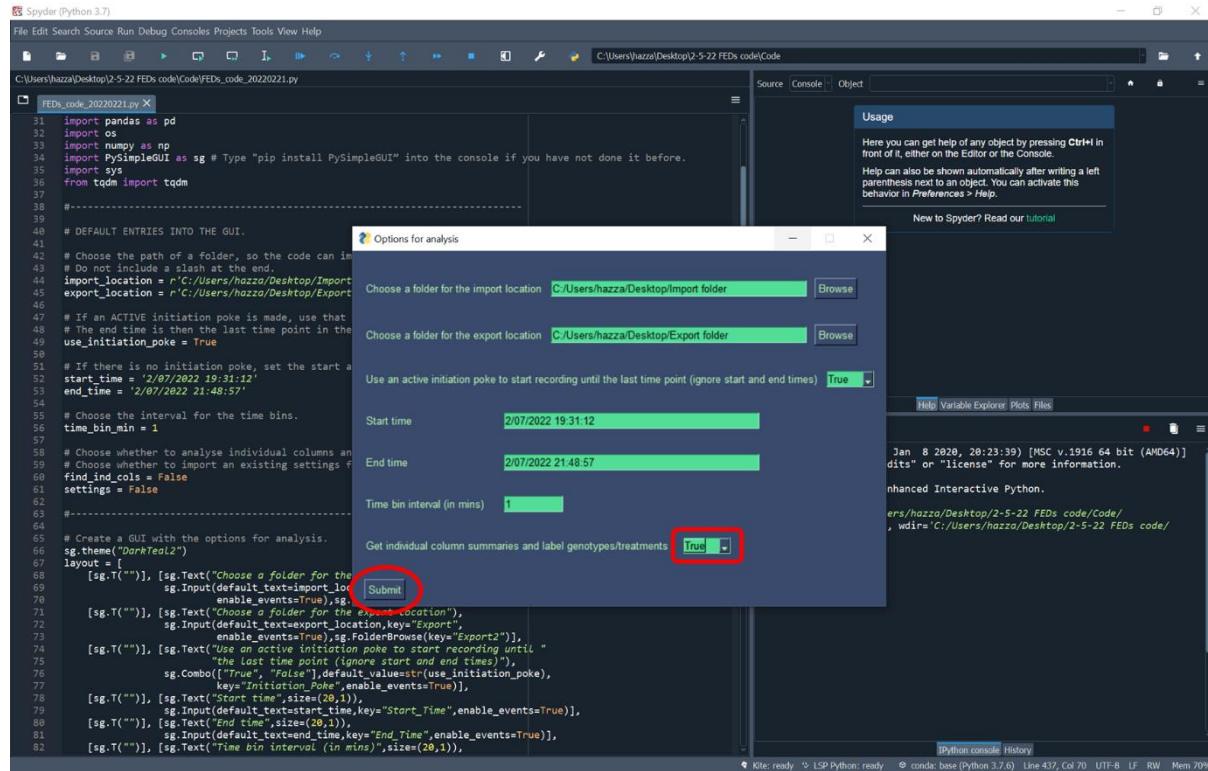
	Date	Time	Time bins (mins)	Library Version	Session Type	Motor Turns	FR	Left Poke Count	Right Poke Count	Pellet Count	Pellet Count Change	Block Pellet Count	Retrieval Time	Interpellet Interval	Poke Time
2	2021-11-24	11:55:20	0 1.11.0	Free_feed	1 0	0 0	0 0	1 0	1 0	0 0	4.55 0	0 0	0 0	0 0	0 0
3	2021-11-24	11:56:20	1 1.0	Free_feed	0 0	0 0	0 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
4	2021-11-24	11:57:20	2 1.0	Free_feed	0 0	0 0	0 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
5	2021-11-24	11:58:20	3 1.0	Free_feed	0 0	0 0	0 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
6	2021-11-24	11:59:20	4 1.11.0	Free_feed	0 0	0 0	0 0	0 0	1 0	0 0	0 0	0 0	0 0	0 0	0 0
7	2021-11-24	12:00:20	5 1.11.0	Free_feed	1 0	0 0	0 0	0 0	7 6	0 0	0 0	0.44 1	0 0	1 0	0 0
8	2021-11-24	12:01:20	6 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
9	2021-11-24	12:02:20	7 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
10	2021-11-24	12:03:20	8 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
11	2021-11-24	12:04:20	9 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
12	2021-11-24	12:05:20	10 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
13	2021-11-24	12:06:20	11 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
14	2021-11-24	12:07:20	12 1.11.0	Free_feed	0 0	0 0	0 0	0 0	7 0	0 0	0 0	0 0	0 0	1 0	0 0
15	2021-11-24	12:08:20	13 1.11.0	Free_feed	1 0	0 0	0 0	0 0	10 3	0 0	0 0	0.88 2	0 0	0 0	0 0
16	2021-11-24	12:09:20	14 1.11.0	Free_feed	0 0	0 0	0 0	0 0	10 0	0 0	0 0	0 0	0 0	2 0	0 0
17	2021-11-24	12:10:20	15 1.11.0	Free_feed	0 0	0 0	0 0	0 0	10 0	0 0	0 0	0 0	0 0	2 0	0 0
18	2021-11-24	12:11:20	16 1.11.0	Free_feed	1 0	0 0	0 0	0 0	11 1	0 0	0 0	60 216	0 0	0 0	0 0
19	2021-11-24	12:12:20	17 1.11.0	Free_feed	0 0	0 0	0 0	0 0	11 0	0 0	0 0	0 0	0 0	216 0	0 0
20	2021-11-24	12:13:20	18 1.11.0	Free_feed	0 0	0 0	0 0	0 0	11 0	0 0	0 0	0 0	0 0	216 0	0 0
21	2021-11-24	12:14:20	19 1.11.0	Free_feed	0 0	0 0	0 0	0 0	11 0	0 0	0 0	0 0	0 0	216 0	0 0
22	2021-11-24	12:15:20	20 1.11.0	Free_feed	0 0	0 0	0 0	0 0	11 0	0 0	0 0	0 0	0 0	216 0	0 0
23	2021-11-24	12:16:20	21 1.11.0	Free_feed	0 0	0 0	0 0	0 0	11 0	0 0	0 0	0 0	0 0	216 0	0 0
24	2021-11-24	12:17:20	22 1.11.0	Free_feed	1 0	0 0	0 0	0 0	14 3	0 0	0 0	0.06 6	0 0	0 0	0 0
25	2021-11-24	12:18:20	23 1.11.0	Free_feed	0 0	0 0	0 0	0 0	14 0	0 0	0 0	0 0	0 0	6 0	0 0
26	2021-11-24	12:19:20	24 1.11.0	Free_feed	0 0	0 0	0 0	0 0	14 0	0 0	0 0	0 0	0 0	6 0	0 0
27	2021-11-24	12:20:20	25 1.11.0	Free_feed	1 0	0 0	0 0	0 0	15 1	0 0	0 0	60 188	0 0	0 0	0 0
28	2021-11-24	12:21:20	26 1.11.0	Free_feed	1 0	0 0	0 0	0 0	16 1	0 0	0 0	57.12 58	0 0	0 0	0 0
29	2021-11-24	12:22:20	27 1.11.0	Free_feed	11 0	0 0	0 0	0 0	17 1	0 0	0 0	49.71 79	0 0	0 0	0 0
30	2021-11-24	12:23:20	28 1.11.0	Free_feed	0 0	0 0	0 0	0 0	17 0	0 0	0 0	0 0	0 0	79 0	0 0
31	2021-11-24	12:24:20	29 1.11.0	Free_feed	0 0	0 0	0 0	0 0	17 0	0 0	0 0	0 0	0 0	79 0	0 0
32	2021-11-24	12:25:20	30 1.11.0	Free_feed	0 0	0 0	0 0	0 0	17 0	0 0	0 0	0 0	0 0	79 0	0 0
33	2021-11-24	12:26:20	31 1.11.0	Free_feed	0 0	0 0	0 0	0 0	17 0	0 0	0 0	0 0	0 0	79 0	0 0
34	2021-11-24	12:27:20	32 1.11.0	Free_feed	0 0	0 0	0 0	0 0	17 0	0 0	0 0	0 0	0 0	79 0	0 0

Pellet count changes sheet

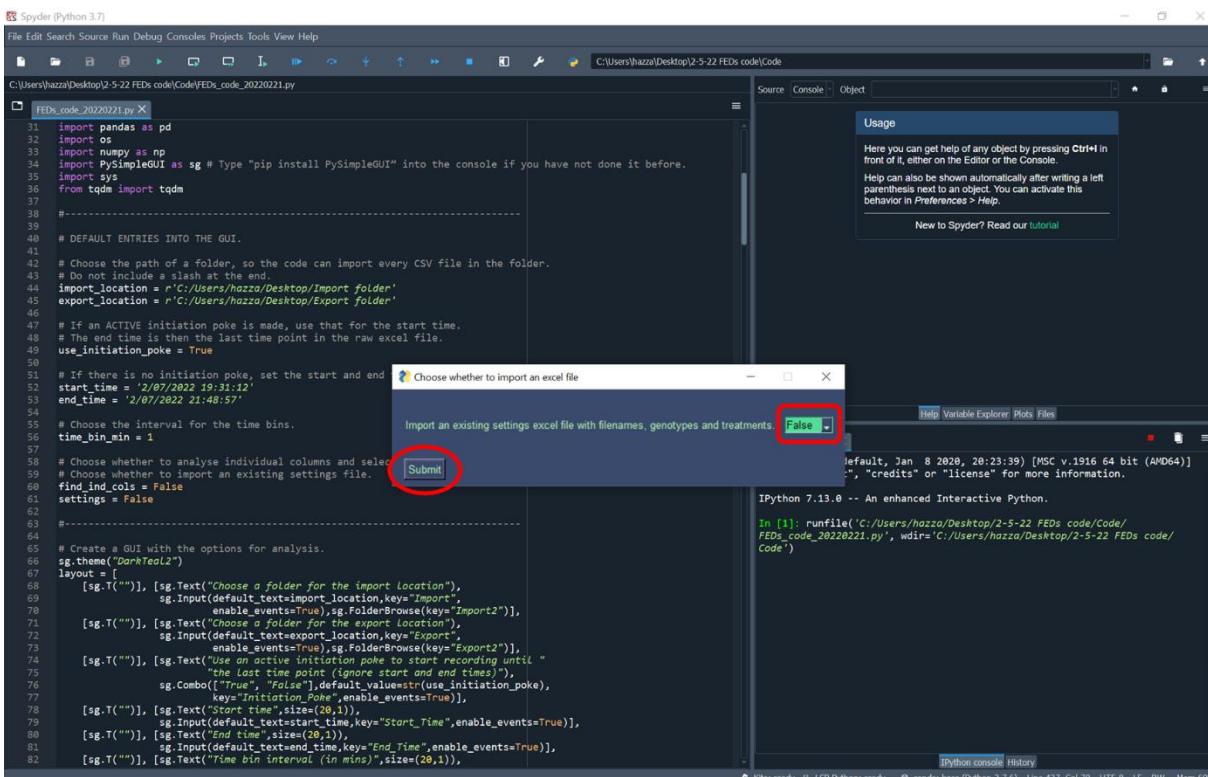
Time bins for FED050_112421_02

	Date	Time	Time (mins)	Library Version	Session Type	Motor Turns	FR	Left Poke Count	Right Poke Count	Pellet Count	Pellet Count Change	Block Pellet Count	Retrieval Time	Interpellet Interval	Poke Time
2	2021-11-24	11:55:20	0 1.11.0	Free_feed	1 0	0 0	0 0	0 0	1 1	0 0	0 0	4.55 0	0 0	0 0	0 0
3	2021-11-24	11:59:37	4.28333333 1.11.0	Free_feed	2 0	0 0	0 0	0 0	2 1	0 0	0 0	60 257	0 0	0 0	0 0
4	2021-11-24	11:59:38	4.3 1.11.0	Free_feed	1 0	0 0	0 0	0 0	3 1	0 0	0 0	0.18 1	0 0	0 0	0 0
5	2021-11-24	11:59:40	4.33333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	4 1	0 0	0 0	0.18 2	0 0	0 0	0 0
6	2021-11-24	11:59:44	4.4 1.11.0	Free_feed	1 0	0 0	0 0	0 0	5 1	0 0	0 0	2.65 4	0 0	0 0	0 0
7	2021-11-24	11:59:45	4.41666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	6 1	0 0	0 0	0.18 1	0 0	0 0	0 0
8	2021-11-24	11:59:45	4.43333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	7 1	0 0	0 0	0.44 1	0 0	0 0	0 0
9	2021-11-24	12:07:30	12.16666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	8 1	0 0	0 0	60 464	0 0	0 0	0 0
10	2021-11-24	12:07:36	12.26666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	9 1	0 0	0 0	5.31 6	0 0	0 0	0 0
11	2021-11-24	12:07:38	12.3 1.11.0	Free_feed	1 0	0 0	0 0	0 0	10 1	0 0	0 0	0.88 2	0 0	0 0	0 0
12	2021-11-24	12:11:14	15.9 1.11.0	Free_feed	1 0	0 0	0 0	0 0	11 1	0 0	0 0	60 216	0 0	0 0	0 0
13	2021-11-24	12:16:29	21.15 1.11.0	Free_feed	1 0	0 0	0 0	0 0	12 1	0 0	0 0	60 315	0 0	0 0	0 0
14	2021-11-24	12:16:31	21.18333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	13 1	0 0	0 0	0.06 2	0 0	0 0	0 0
15	2021-11-24	12:16:37	21.28333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	14 1	0 0	0 0	0.06 6	0 0	0 0	0 0
16	2021-11-24	12:19:45	24.41666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	15 1	0 0	0 0	60 188	0 0	0 0	0 0
17	2021-11-24	12:20:43	25.38333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	16 1	0 0	0 0	57.12 58	0 0	0 0	0 0
18	2021-11-24	12:22:02	26.7 1.11.0	Free_feed	11 0	0 0	0 0	0 0	17 1	0 0	0 0	49.71 79	0 0	0 0	0 0
19	2021-11-24	12:27:45	32.41666667 1.11.0	Free_feed	2 0	0 0	0 0	0 0	18 1	0 0	0 0	60 343	0 0	0 0	0 0
20	2021-11-24	12:32:11	36.85 1.11.0	Free_feed	1 0	0 0	0 0	0 0	19 1	0 0	0 0	60 266	0 0	0 0	0 0
21	2021-11-24	12:36:17	40.95 1.11.0	Free_feed	1 0	0 0	0 0	0 0	20 1	0 0	0 0	60 246	0 0	0 0	0 0
22	2021-11-24	12:36:50	41.5 1.11.0	Free_feed	6 0	0 0	0 0	0 0	21 1	0 0	0 0	14.94 33	0 0	0 0	0 0
23	2021-11-24	12:47:28	52.13333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	22 1	0 0	0 0	60 638	0 0	0 0	0 0
24	2021-11-24	12:47:58	52.63333333 1.11.0	Free_feed	2 0	0 0	0 0	0 0	23 1	0 0	0 0	20.27 30	0 0	0 0	0 0
25	2021-11-24	12:49:31	54.18333333 1.11.0	Free_feed	2 0	0 0	0 0	0 0	24 1	0 0	0 0	60 93	0 0	0 0	0 0
26	2021-11-24	12:50:24	55.06666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	25 1	0 0	0 0	47.4 53	0 0	0 0	0 0
27	2021-11-24	12:50:32	55.2 1.11.0	Free_feed	1 0	0 0	0 0	0 0	26 1	0 0	0 0	0.75 8	0 0	0 0	0 0
28	2021-11-24	12:54:14	58.9 1.11.0	Free_feed	2 0	0 0	0 0	0 0	27 1	0 0	0 0	60 221	0 0	0 0	0 0
29	2021-11-24	12:58:10	62.83333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	28 1	0 0	0 0	60 237	0 0	0 0	0 0
30	2021-11-24	12:59:25	64.08333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	29 1	0 0	0 0	60 75	0 0	0 0	0 0
31	2021-11-24	12:59:49	64.48333333 1.11.0	Free_feed	1 0	0 0	0 0	0 0	30 1	0 0	0 0	60 17.48	24	0 0	0 0
32	2021-11-24	13:09:24	74.06666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	31 1	0 0	0 0	60 575	0 0	0 0	0 0
33	2021-11-24	13:14:51	79.51666667 1.11.0	Free_feed	1 0	0 0	0 0	0 0	32 1	0 0	0 0	60 327	0 0	0 0	0 0
34	2021-11-24	13:15:19	79.98333333 1.11.0	Free_feed	2 0	0 0	0 0	0 0	33 1	0 0	0 0				

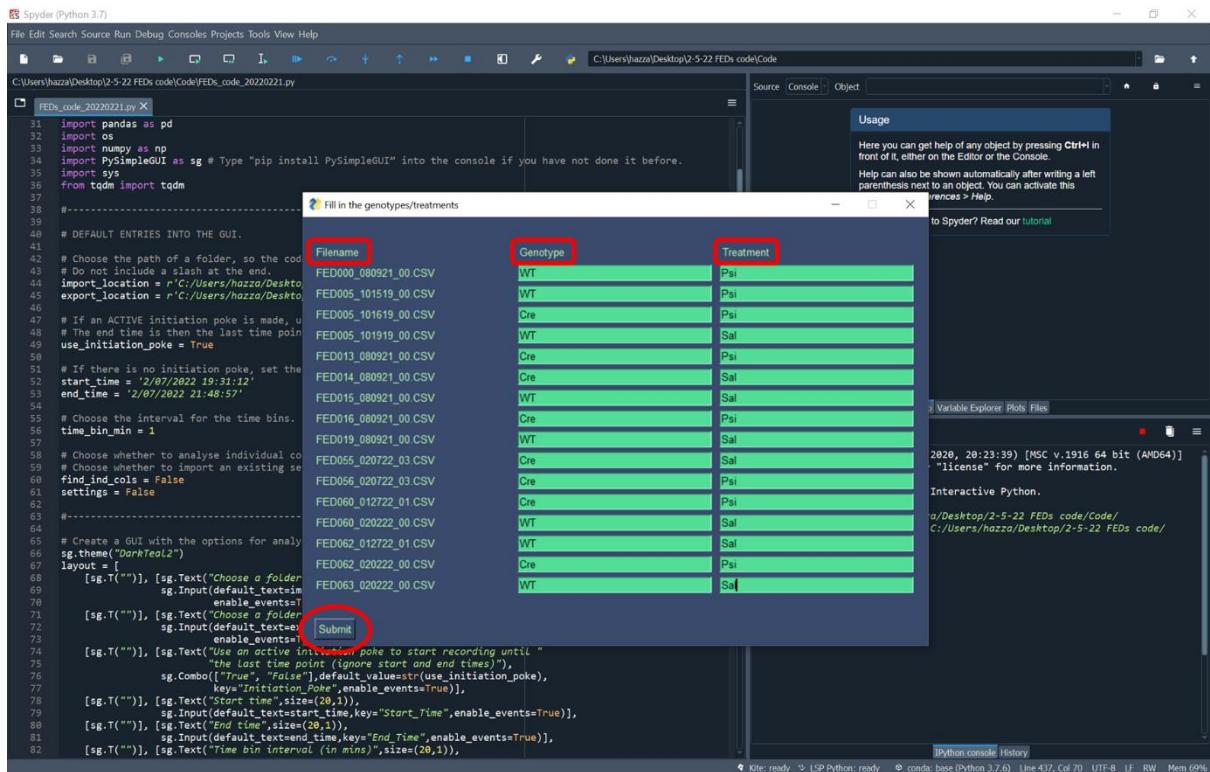
4. The option “get individual columns summaries” at the start of the GUI can also be used to create a master excel file, that combines the columns from all excel files. Note that the raw FED files should still be imported, not the time binned files.



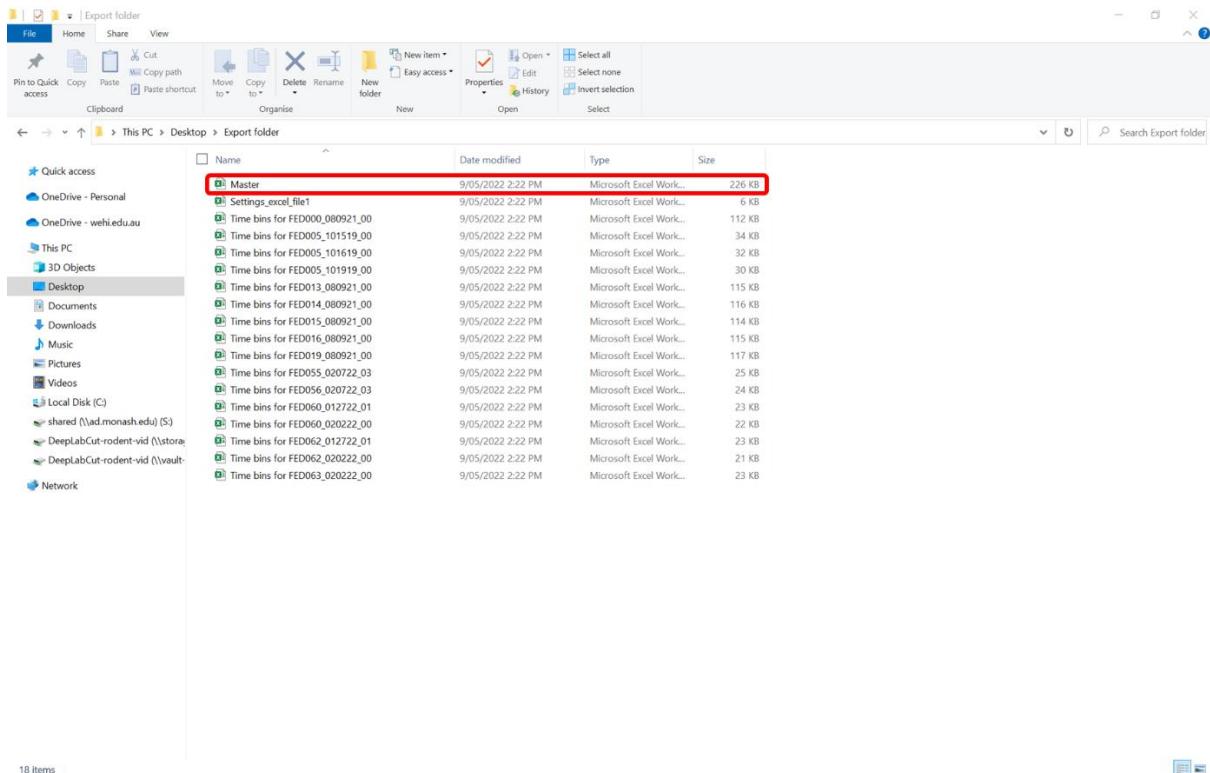
5. Set this option to False, if you want to put in the genotypes and treatments in the built-in GUI. Setting this option to True will be explained from step 14 onwards.



6. Put in the genotypes and treatments. These entries can also be left blank.



7. The individual excel files will be sorted into time bins and a “Master.xlsx” file will also be created.



8. Here is the Master.xlsx file. There is a sheet for every column in the raw data files. For example, in the “Left poke count” sheet selected below:

- The far left column is the time bins in minutes.
- Every other column is the “Left poke count” column from each of the imported files.
- The columns are also sorted by genotype and then treatment.
- This is the same for every sheet/column type.

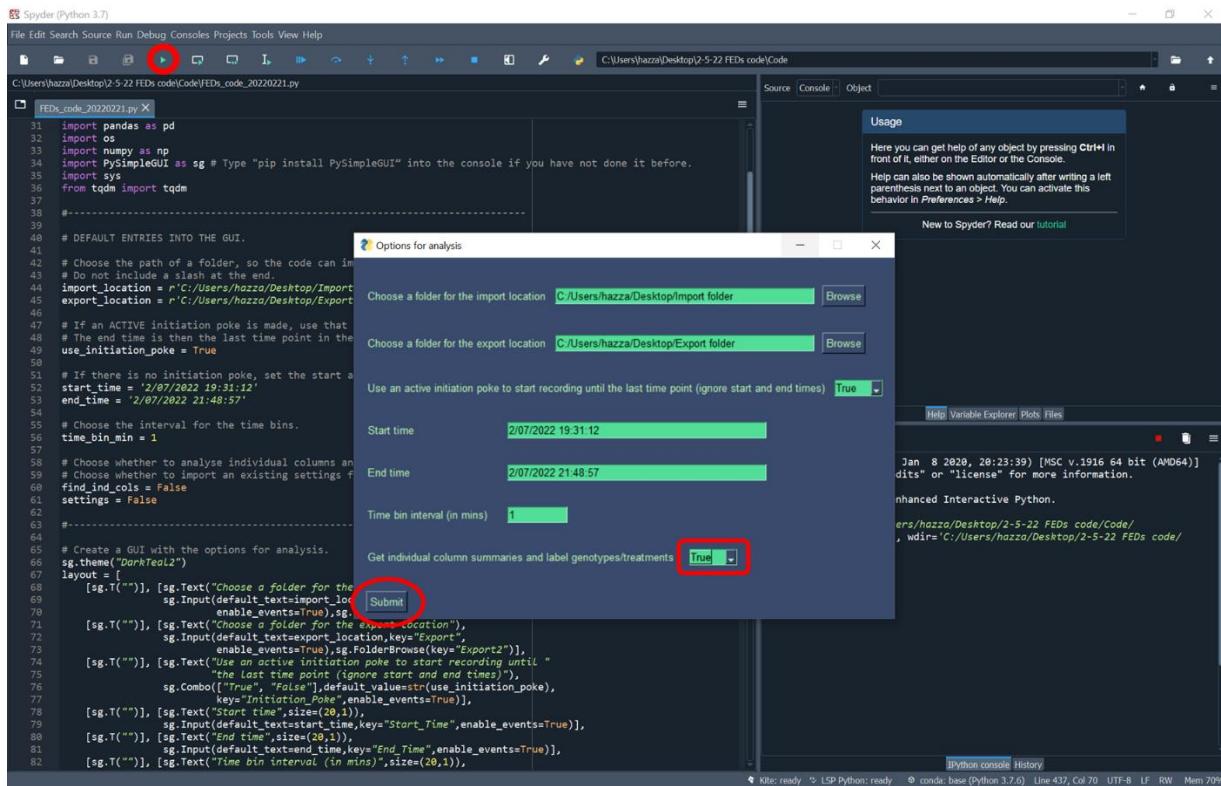
9. Another thing that is exported is the “settings_excel_file.xlsx”. Note that every time a settings excel file is created, a unique number is added to the end, so you will never overwrite this file.

Filename	Genotype	Treatment
FED000_080921_00.CSV	WT	Psi
FED005_101519_00.CSV	WT	Psi
FED005_101619_00.CSV	Cre	Psi
FED005_101919_00.CSV	WT	Sal
FED013_080921_00.CSV	Cre	Psi
FED014_080921_00.CSV	Cre	Sal
FED015_080921_00.CSV	WT	Sal
FED016_080921_00.CSV	Cre	Psi
FED019_080921_00.CSV	WT	Sal
FED055_020722_03.CSV	Cre	Sal
FED056_020722_03.CSV	Cre	Psi
FED060_012722_01.CSV	Cre	Psi
FED060_020222_00.CSV	WT	Sal
FED062_012722_01.CSV	WT	Sal
FED062_020222_00.CSV	Cre	Psi
FED063_020222_00.CSV	WT	Sal

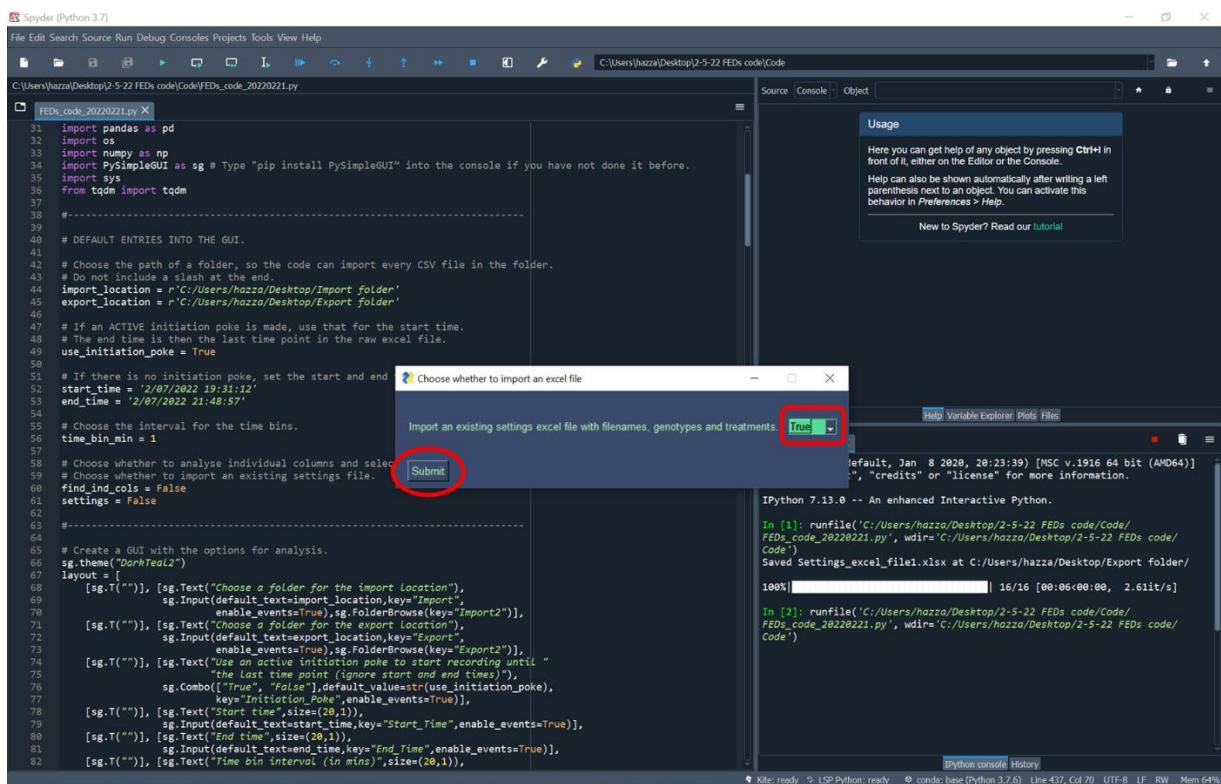
11. The filenames, genotypes and treatments can also be edited and re-imported. Note that the bold text and borders are not important for reading the file.

Filename	Genotype	Treatment
FED000_080921_00.CSV	HET	Ghr
FED005_101519_00.CSV	HOM	Ghr
FED005_101619_00.CSV	HOM	Sal
FED005_101919_00.CSV	HOM	Sal
FED013_080921_00.CSV	HET	Ghr
FED014_080921_00.CSV	HOM	Ghr
FED015_080921_00.CSV	HOM	Ghr
FED016_080921_00.CSV	HET	Sal
FED019_080921_00.CSV	HET	Sal
FED055_020722_03.CSV	HET	Sal
FED056_020722_03.CSV	HOM	Ghr
FED060_012722_01.CSV	HET	Sal
FED060_020222_00.CSV	HOM	Ghr
FED062_012722_01.CSV	HOM	Sal
FED062_020222_00.CSV	HOM	Sal
FED063_020222_00.CSV	HET	Ghr

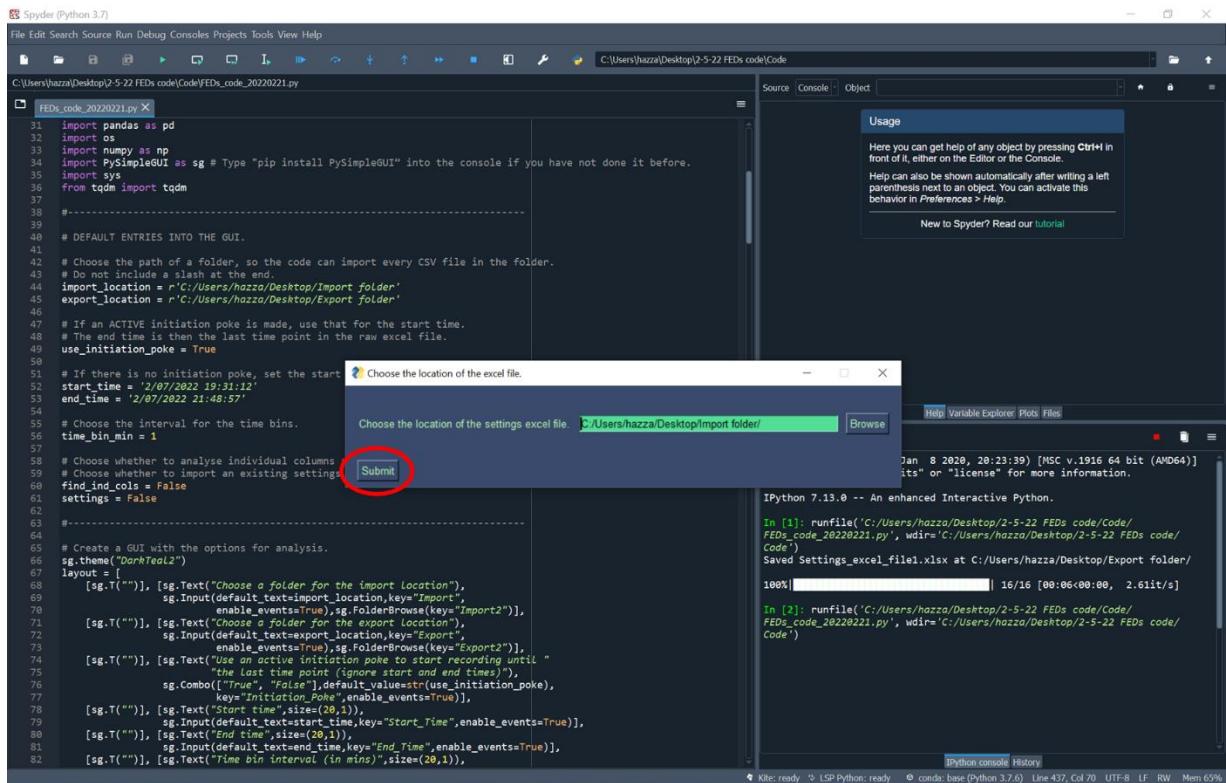
12. Re-run the code by pressing the green triangle and ensure “get individual column summaries” is set to True.



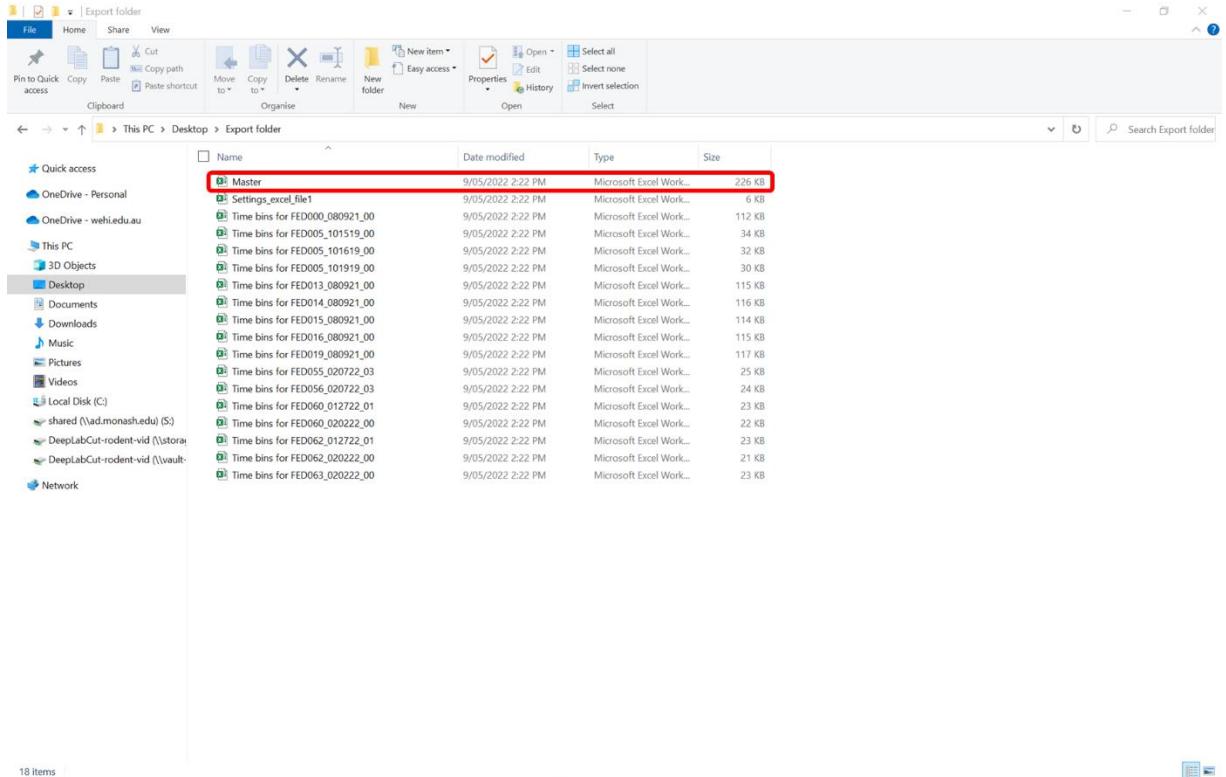
13. Set “import an existing settings excel file” to True.



14. Choose the location of the settings excel file and click submit.



15. Now when you go into the re-exported Master.xlsx file...



16. The genotypes and treatments are edited.

The screenshot shows a Microsoft Excel spreadsheet with the following structure:

- Row 1:** Headers for "Time bins (mins)" followed by a long string of session IDs: 080921_080921_020222_080921_080921_020722_012722_101519_080921_080921_020722_020222_101619_101919_012722_020222_00.CSV.
- Row 2:** Headers for "Genotype" (HET/HOM) and "Treatment" (Ghr/Sal).
- Row 3:** Sub-headers for each genotype/treatment combination: HET Ghr, HET Ghr, HET Sal, HET Sal, HET Ghr, HET Ghr, HOM Ghr, HOM Ghr, HOM Sal, HOM Sal, HOM Ghr, HOM Ghr, HOM Sal, HOM Sal.
- Rows 4-34:** Data entries for each row, corresponding to the session ID in Row 1. Each row contains 14 data points (Ghr/Sal pairs for each genotype).
- Bottom Row:** Session Type (FR), Left Poke Count, Right Poke Count, Pellet Count, Block Pellet Count, Retrieval Time, Interpell ...
- Status Bar:** Shows "Edited" status.