Setting up PsychoPy to Send LSL signal to NIRx Device

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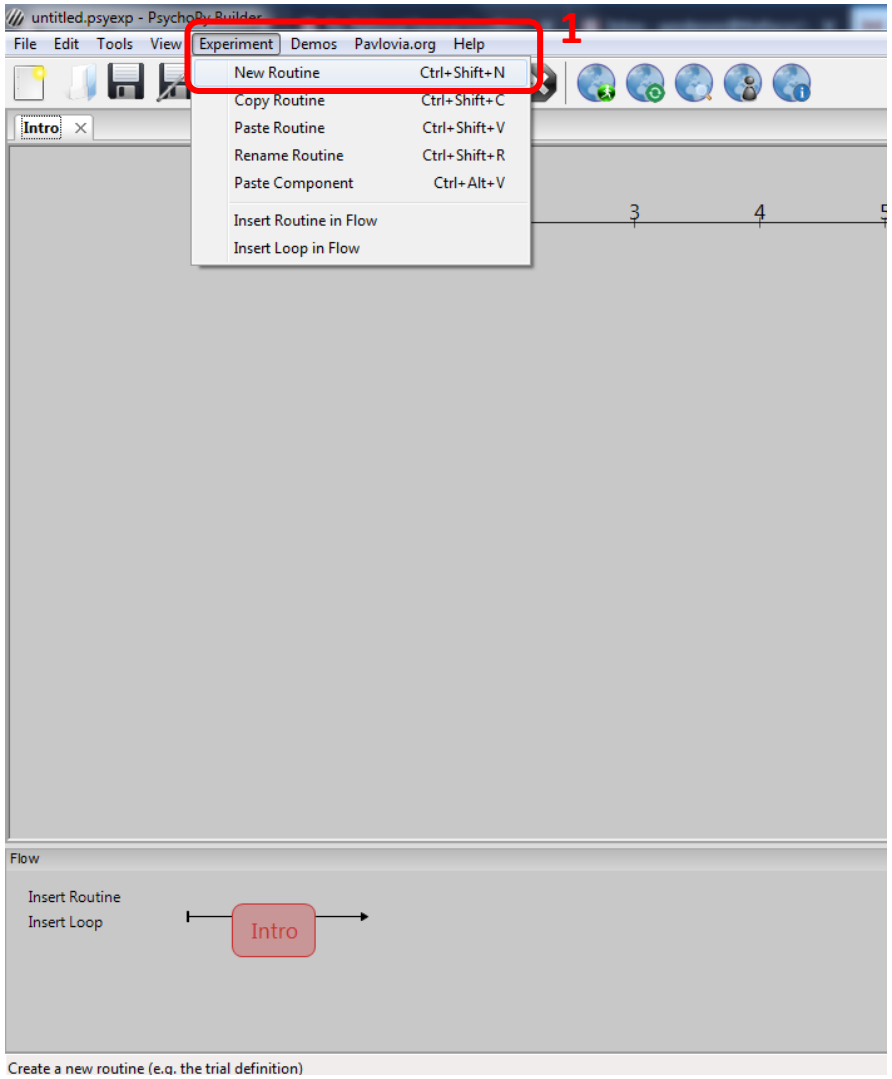

Open the PsychoPy software

1) **Create a new routine by clicking on experiment tab**
2) **Name the routine (in this example it is called “LSL”)**

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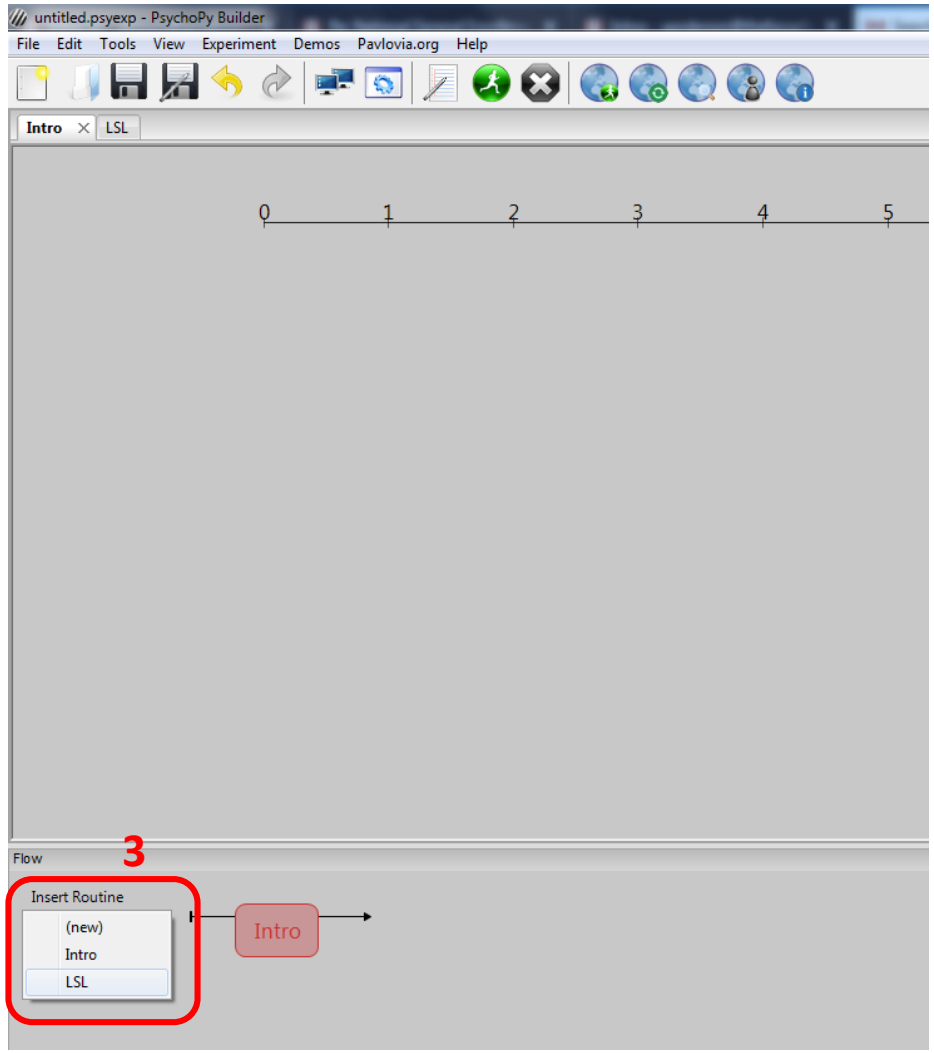

3) Click on Insert routine (bottom left) and click on “LSL”

This will insert the routine that was just created in the experiment design

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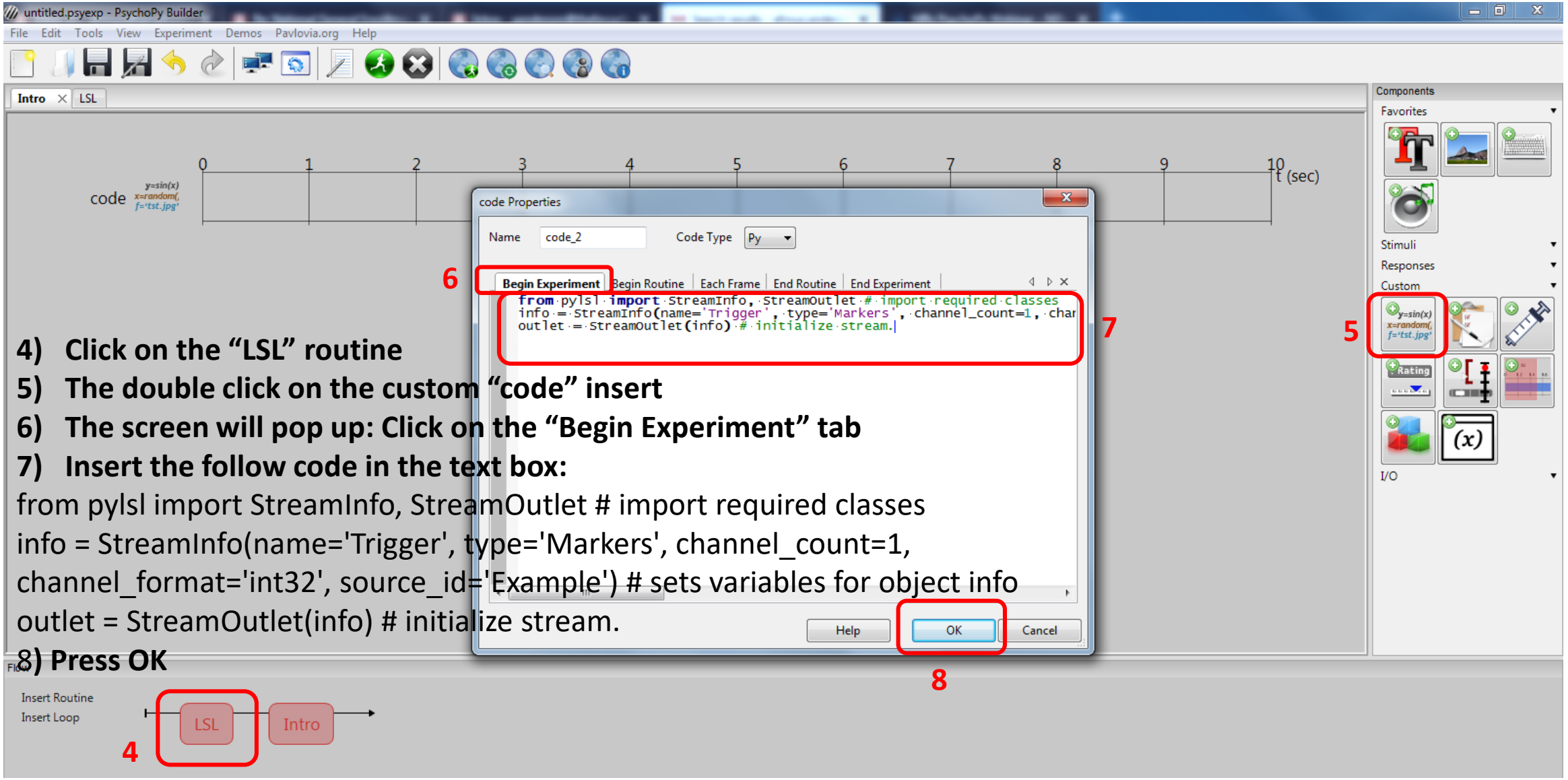

4) **Click on the "LSL" routine**
5) **The double click on the custom "code" insert**
6) **The screen will pop up: Click on the "Begin Experiment" tab**
7) **Insert the follow code in the text box:**

```
from pylsl import StreamInfo, StreamOutlet # import required classes
info = StreamInfo(name='Trigger', type='Markers', channel_count=1,
channel_format='int32', source_id='Example') # sets variables for object info
outlet = StreamOutlet(info) # initialize stream.
```

8) **Press OK**

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- **Please ensure that the name “Trigger” is the same as the LSL trigger name in Aurora**

```
from pylsl import StreamInfo, StreamOutlet # import required classes

info = StreamInfo(name='Trigger', type='Markers', channel_count=1, channel_format='int32',
source_id='Example') # sets variables for object info

outlet = StreamOutlet(info) # initialize stream.
```

- **The previous code initializes the LSL connection**

- **Ensure that the LSL routine is located before the start of your actual experiment**

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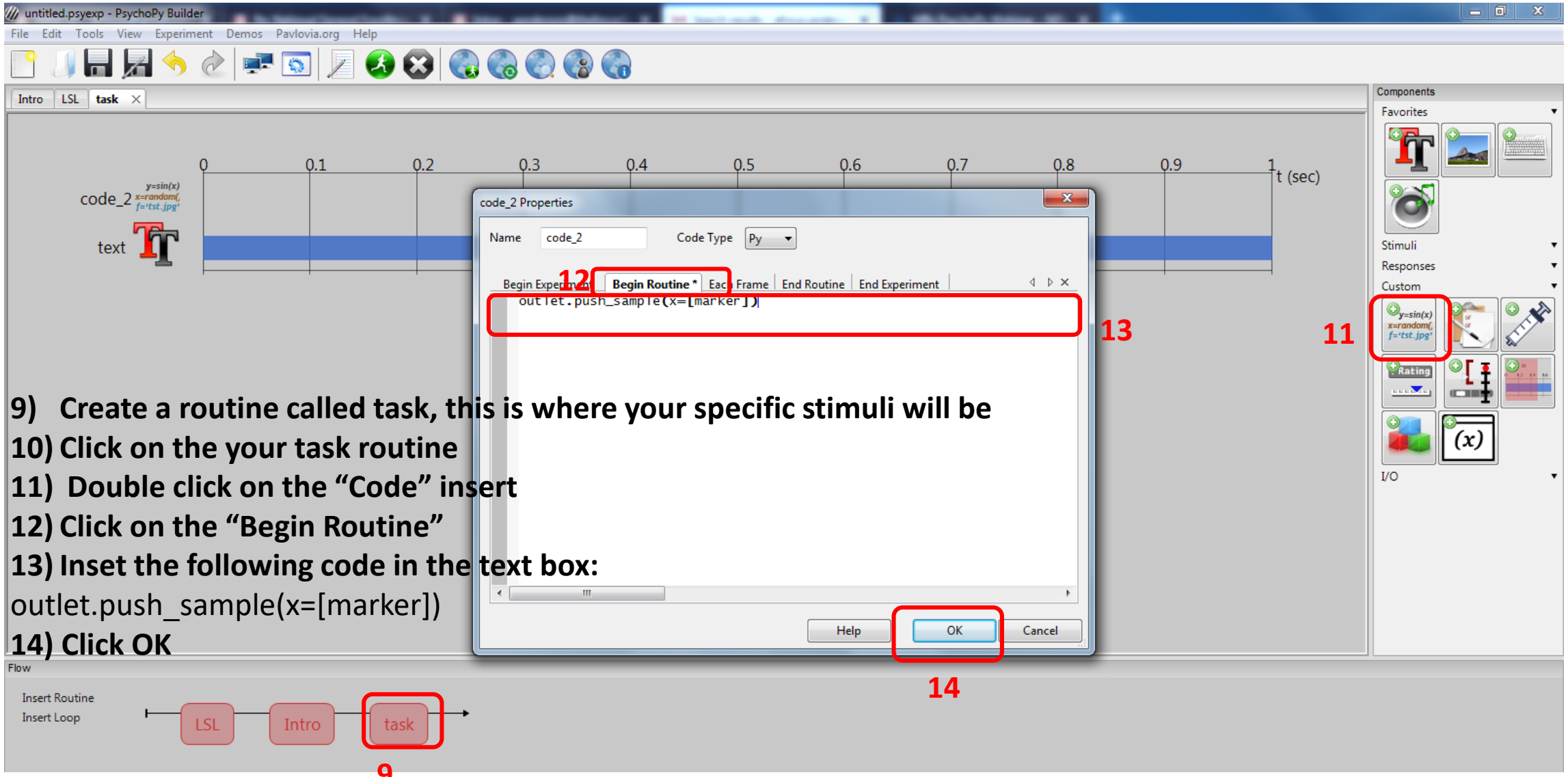

9) Create a routine called task, this is where your specific stimuli will be

10) Click on the your task routine

11) Double click on the "Code" insert

12) Click on the "Begin Routine"

13) Inset the following code in the text box:

outlet.push_sample(x=[marker])

14) Click OK

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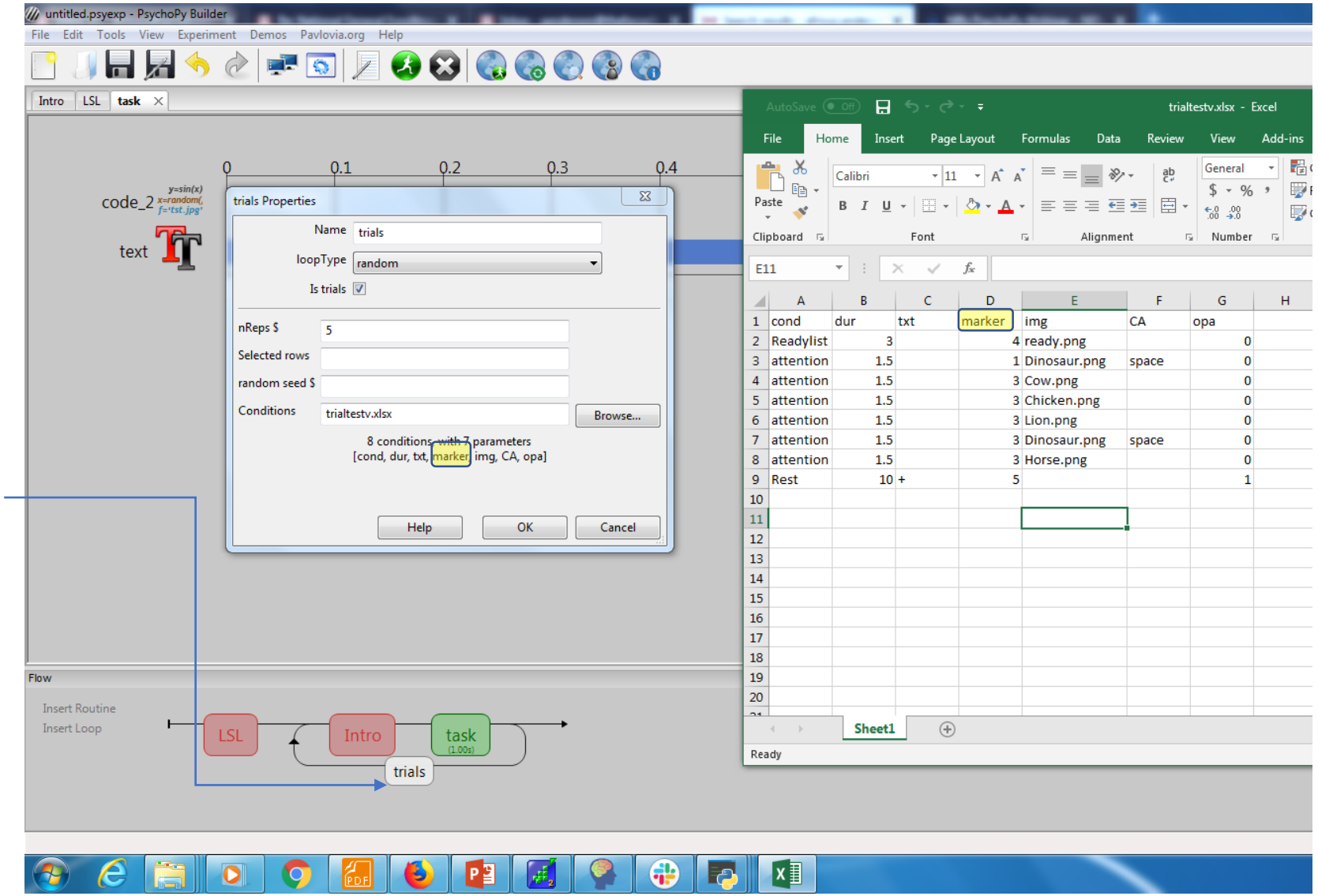
The name “marker” in the code line should match with the name of the parameter that you define in the excel sheet

outlet.push_sample(x=[marker])

In this example, we have inserted the loop (called “trials”), where it reads the parameter and conditions from the excel file. The excel file can be located using the browse button in loop properties. Loop properties can be opened by clicking on the loop.

The parameter name in the excel file is defined as “marker”. The code will use the numbers that are defined in the marker column (4, 1, 3…)



NIRX

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Through our offices in Berlin, Los Angeles, Minneapolis, New York, and D.C. our engineers and grant funded investigators provide a growing number of research teams world-wide with comprehensive technology solutions for the most demanding investigative applications.

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