# Learning Objectives

1. To learn some more code elements
2. To work on your assessment with in-class support

# Activity 9.0

## Providing average reaction times for conditions at the end of an experiment.

**To add average reaction times, you will need to use a small amount of code**.

You will be using a version of an experiment that combines both the Simple Reaction Time (Week 1) and Choice Reaction Time (Week 2 and Week 5). Remember that we discussed how we respond faster to a simple single stimulus when compared with having to make a choice. Resources are on the Week 9 activities page.

Figure 1. Trial Visualisations for SRT & CRT

Part 1 – SRT

ISI (dur varies)

Stimulus (until keypress)

Blank screen (200ms/ 0.2sec)

Part 2 - CRT

Stimulus Conditions

Circle/Square

Fixation

(300ms/0.3sec)

Stimulus

(until keypress)

Blank screen

(200ms/ 0.2sec)

**Procedure**

In Part 1 of the experiment (Simple Reaction Time) the participant will see a fixation cross presented for a random duration between 1500ms to 4000ms, followed by a circle stimulus and they are required to press the b key on stimulus presentation. A blank screen is then shown for 200ms.

In Part 2 (Choice Reaction Time) the participant will be presented with a fixation cross for 350ms, followed by either a circle or a square. In response they should press the z key for a circle, and the m key for a square. A blank screen is shown for 200ms.

In total the participant will see 12 SRT and 12 CRT trials.

1. Create a **new Routine** after the **CRTBlock** loop. Call it **AvFeedback**
2. Add two **Text** components, call them **SRTfeedback** and **CRTfeedback**
3. Add a **Code** component, move the code component to the top of the routine
4. In the code component, on the **Begin Experiment** tab type in the following

#create two lists for PsychoPy to save the reaction times

SRT\_list=[]

CRT\_list=[]

1. In the Begin Routine tab type in the following

if (circleSRTResp.corr == 1):

SRT\_list.append(circleSRTResp.rt)

srt\_array = np.array(SRT\_list)

srtmean\_rt = srt\_array.mean()

SRTtext = "Your mean Simple RT is %.2f s " %(srtmean\_rt)

if (shape\_CRT\_Resp.corr == 1):

CRT\_list.append(shape\_CRT\_Resp.rt)

crt\_array = np.array(CRT\_list)

crtmean\_rt = crt\_array.mean()

CRTtext = "Your mean Choice RT is %.2f s " %(crtmean\_rt)

1. In the **SRTfeedback** text component type in **$SRTtext** and set it to every repeat.
2. Use your understanding to position the text on screen, change the font size/colour appropriately and repeat for the CRTfeedback text component
3. Run the experiment to check the feedback works correctly

# Activity 9.1

## Work on your assessment in class

If you have completed this activity you should work on your assessment in-class where you can ask for support from your tutor.