

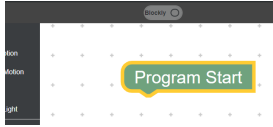
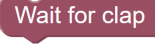

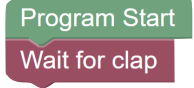


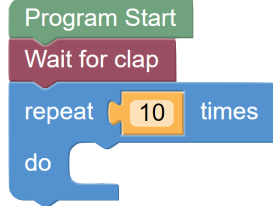

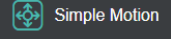
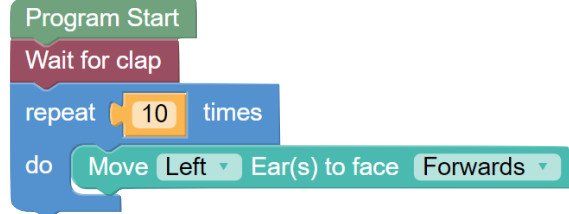
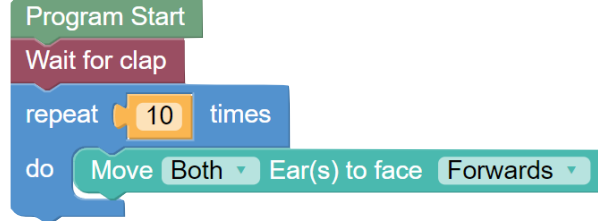


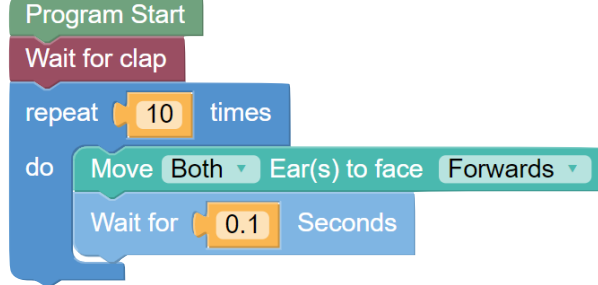
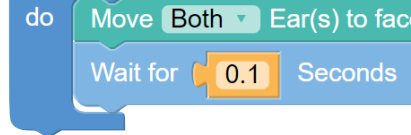
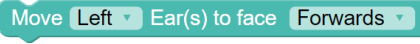
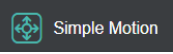
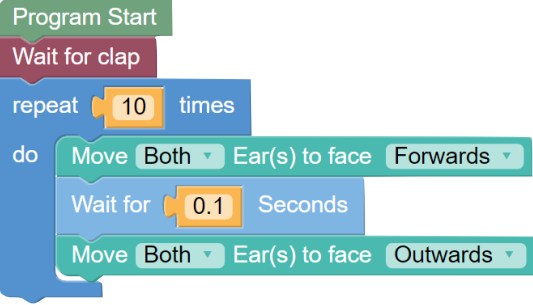


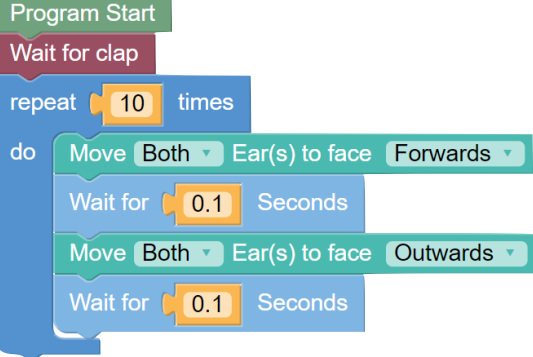
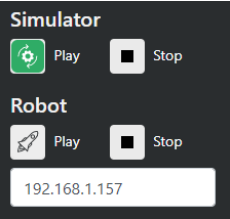
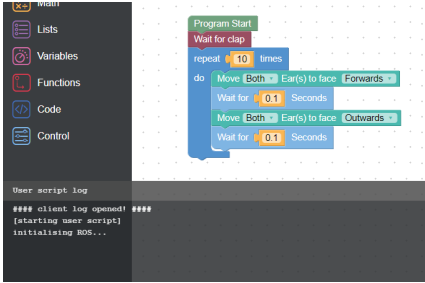

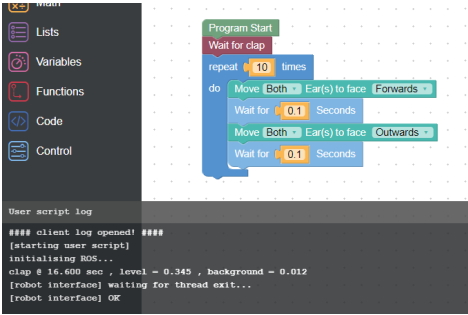


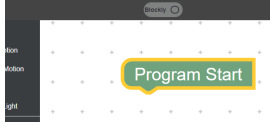
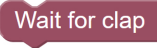
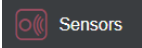

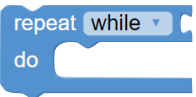
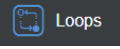
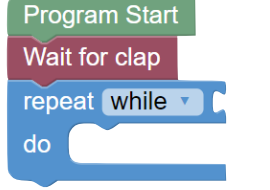
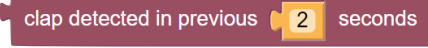
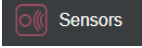
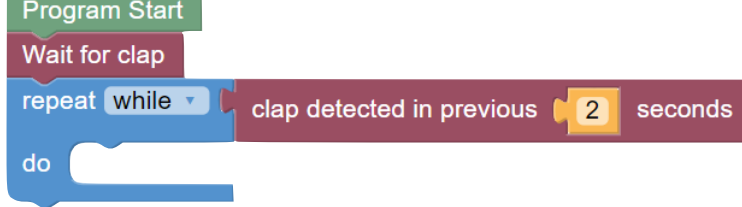

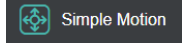


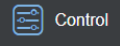
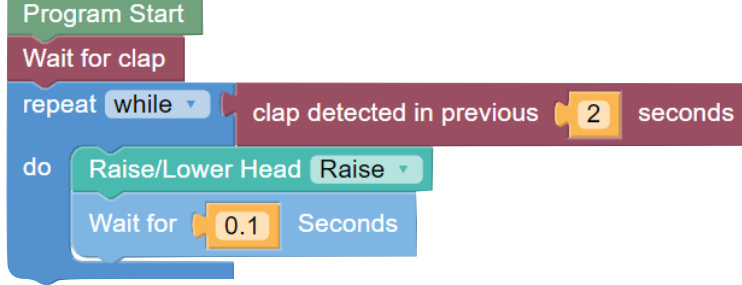
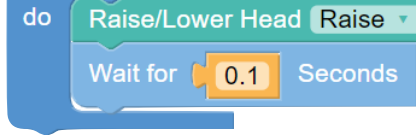



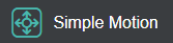
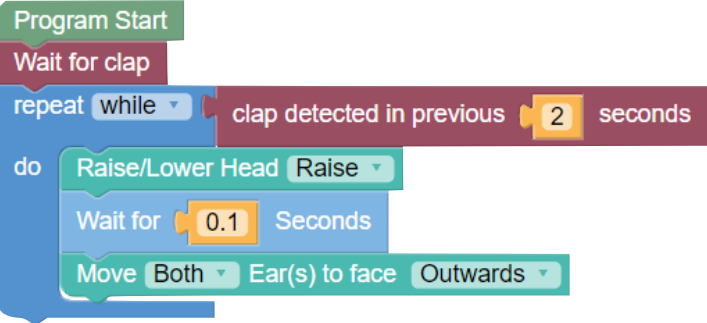

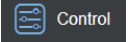
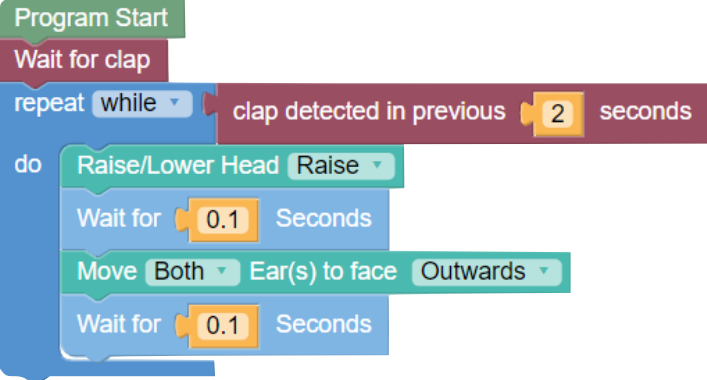

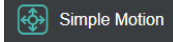
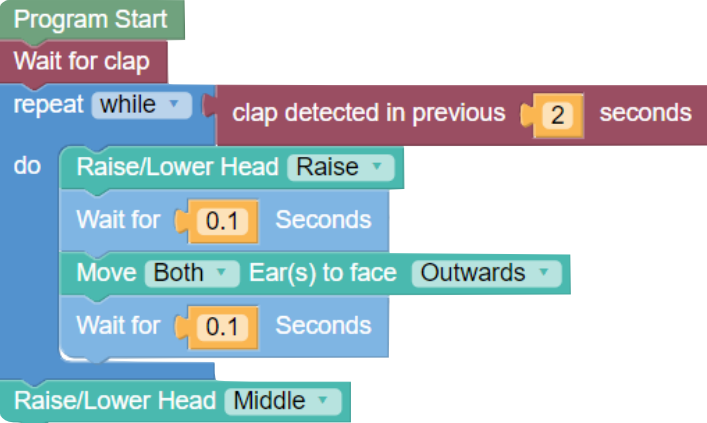
ACTIVITY 1 Step-by-Step - Simulate MiRo to wag it's ears when clapping


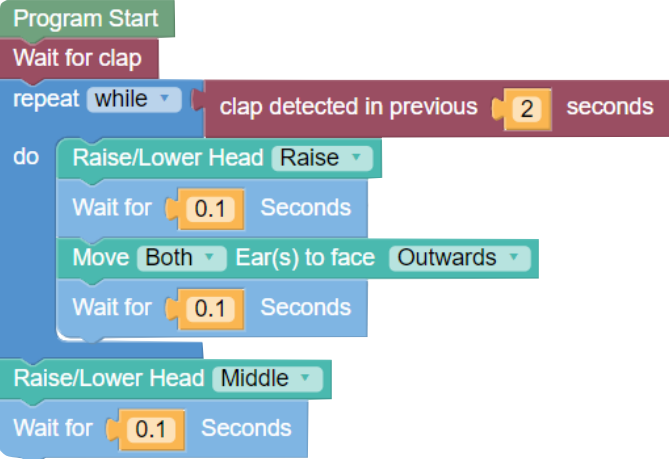
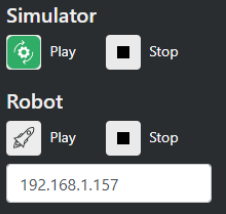
Step	Block	From	Image
1 Add 1 x Program Start block			
2 Add 1 x Wait for Clap block			
3 Add 1 x Repeat 10 Times block			
4 Add 1 x Move Left Ear(s) to face Forwards block			
5 Set block to 'both' on the first dropdown menu			
6 Add 1 x Wait block			
Change the number of seconds to wait to 0.1 seconds			

Step	Block	From	Image
7	Add 1 x Move Left Ear(s) to face Forwards block 		
	Set block to 'both' on the first dropdown menu Set block to 'outwards' on the second dropdown menu		
8	Add 1 x Wait block 		
	Change the number of seconds to wait to 0.1 seconds		
9	Click Robot Play OR Simulator Play REMEMBER: you need to clap to start the program either on the simulator or with the physical MiRo.		
Follow a program		Simulate the clap by clicking this icon  OR With physical MiRo - clap your hands	Script at bottom shows program ran correctly. 

ACTIVITY 2 Step-by-Step - Create a program to enable MiRo to react to a clap for a set amount of time

Step	Block	From	Image
1 Add 1 x Program Start block			
2 Add 1 x Wait for Clap block			
3 Add 1 x Repeat While block			
4 Add 1 x Clap Detected in Previous 2 Seconds block			
5 Add 1 x Raise/Lower Head [raise] block			
6 Add 1 x Wait block			
Change the number of seconds to wait to 0.1 seconds			

Step	Block	From	Image
7	<p>Add 1 x Move Left Ear(s) to face Forwards block</p> 	 Simple Motion	
<p>Set block to 'both' on the first dropdown menu Set block to 'outwards' on the second dropdown menu</p>			
8	<p>Add 1 x Wait block</p> 	 Control	
<p>Change the number of seconds to wait to 0.1 seconds</p>			
9	<p>Add 1 x Wait block</p> 	 Simple Motion	
<p>Set the head to raise to 'middle' on the drop-down menu</p>			

Step	Block	From	Image
7	Add 1 x Move Left Ear(s) to face Forwards block		
Change the number of seconds to wait to 0.1 seconds			
9	Click Robot Play OR Simulator Play		

EXTENSION

Click the button above the block code with the word 'Blockly' on it and switch the screen to 'python'.

Python

Reset to Blockly Code
Edit Code

```

1  # imports
2  import time
3  import miro2 as miro
4
5  # definitions
6
7
8  # setup
9  robot = miro.interface.PlatformInterface()
10 time.sleep(1.0)
11
12 # control
13 while robot.clap() == False:
14     time.sleep(0.025)
15 while robot.clap_in_previous(2):
16     robot.set_neck(miro.constants.JOINT_LIFT, 5)
17     robot.sleep(0.1)
18     robot.set_joint(miro.constants.JOINT_EAR_L, 1.0)
19     robot.set_joint(miro.constants.JOINT_EAR_R, 1.0)
20     robot.sleep(0.1)
21     robot.set_neck(miro.constants.JOINT_LIFT, 34)
22     robot.sleep(0.1)
23 # exit
24 robot.exit()
25

```

Can you narrate anything that happens in the code?