**Step-by-Step**

We are going to create a program where MiRo will open its eyes, wag its tail and display green colours IF you pat MiRo’s head. If MiRo does not sense a touch, it will close its eyes and display red colours.

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| **Step** | **Block** | **From** | **Connect** |
| **1**  Add **1** x **program start** block |  |  |  |
| **2**  Add **1** x **Periodic Control Loop** block |  |  |  |
| **3**  Add **1** x **set item** block |  |  |  |
| **4**  Rename the variable to ‘stroked’ by:   * Click the arrow next to the word ‘item’ * Select ‘rename variable’ * Rename variable to: ‘stroked’ | | |  |
| **5**  Add **1** x **true** block |  |  |  |
| **6**  Change ‘true’ to ‘false’ within the drop-down menu | | |  |
| **7**  Add **1** x **for each item ‘i’ in list** block |  |  |  |
| **8**   * Click the arrow next to the letter ‘i’ * Select ‘rename variable’ * Rename variable to: ‘sensor’ | | |  |
| **9**  Add **1 x head touch sensors** block |  |  |  |
| **10**  Add **1 x if do** block |  |  |  |
| **11**  Add **1 x ( ) = ( )** block |  |  |  |
| **12**  Add **1 x sensor** block |  |  |  |
| **13**  Add **1 x (0)** block |  |  |  |
| **14**  Set the math block to: **1** | | |  |
| **15**  Add **1 x set stroked to** block |  |  |  |
| **16**  Add **1 x true** block |  |  |  |
| **17**  Add **1 x if do** block |  |  |  |
| **18**  Add **1 x else** section by clicking the blue settings icon and dragging an else over to connect under the if section. | | |  |
| **19**  Add **1 x sensor** block |  |  |  |
| **20**  Add **1 x change front LED on left side to Bright red** block |  |  |  |
| **21**  Set the block to **‘All’** LED on **‘Both’** side to Bright **‘green’** within the drop-down menus | | |  |
| **22**  Right click and duplicate the ‘change All LED on Both Bright green’ block  Set colour to **‘red’** | | |  |
| **23**  Add:  **1 x Move Left Eyelid(s)** block  **1 x Wag Tail** block  **1 x Look Up/Down**  block |  |  |  |
| **24**  Set the blocks to open both eyelids and wag tail fastest for 1 second | | |  |
| **25**  Right click and duplicate the ‘move both eyelids to open’ block | | |  |
| **26**  Set to ‘closed’ | | |  |
| **27**  Click  **Robot Play**  OR  **Simulator Play** | | |  |
| **Follow a program** | **Script at bottom of screen shows code is ready to run.** | **Simulate the stroking of the head by clicking this icon**  **OR**  **With physical MiRo - stroke MiRo’s head** | **Script at bottom shows program ran correctly.** |
| **See the output** | | **IF** your hand touches MiRo’s head:  MiRo will open its eyes, wag its tail and  display green colours on its body  **ELSE:**  MiRo will close its eyes, and display red  colours on its body | |