**Pi2Go Simulator Programming: WS28 Sample Answers**

**General Trouleshooting:** Watch out for complaints about apostraphes if students are cutting and pasting between the worksheet and IDLE.

**Question 1:** A dictionary is printed which will look something like:

{'distance': 630.0, 'obstacle\_right': 0, 'obstacle\_left': 0, 'obstacle\_centre': 0, 'line\_left': 0, 'line\_right': 0, 'switch\_pressed': 0, 'lightFL': 0, 'lightFR': 0, 'lightBL': 0, 'lightBR': 0}

Though values may vary.

**Question 2:** This will depend upon the set up. In the beliefbase above the value is 630.

**Question 3:** The dictionary now contains 'test': 1

**Question 4:** 'name': 'pi2go'has been added.

**Question 5:** There is no ‘name’ key in the dictionary.

**Question 6:** It returns True because distance is a key in the dictionary.

**Question 7:** It prints out the value of the distance sensor stored in the belief base.

**Question 8:** It prints a list containing the string ‘a\_goal’

**Question 9:** It prints an empty list. check\_goals removed ‘a\_goal’ from the goalbase because ‘a\_goal’ was now an agent belief.

**Question 10:** The simulated Pi2Go moves forward and then stops – just like typing pi2go.forward(10) etc. in earlier exercises. This is because the robot is a field in the agent object.



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