**Virtual Initio Programming: WS29 Sample Answers**

**Question 1:** The agent continuously prints out its beliefs. These are the current beliefs so if, for instance, a block is moved in front of the agent then the distance belief will change.

**Exercise 1:**

import bdi.initioagent as cognitive

agent = cognitive.InitioAgent()

def print\_beliefs():

 print(agent.beliefbase['distance'])

 return

agent.add\_rule(print\_beliefs)

agent.run\_agent()

**Question 2:** The agent mostly apparently does nothing, but when something is closer than 50 to the distance sensor, then it prints out the belief base.

**Exercise 2:**

import bdi.initioagent as cognitive

agent = cognitive.InitioAgent()

def reverse\_rule():

 agent.robot.reverse(10)

 return

agent.add\_condition\_rule(agent.B('obstacle\_left'), reverse\_rule)

agent.run\_agent()

**Exercise 3:**

import bdi.initioagent as cognitive

import time

agent = cognitive.InitioAgent()

def reverse\_rule():

 agent.robot.reverse(10)

 time.sleep(5)

 agent.stop()

 agent.done()

 return

agent.add\_condition\_rule(agent.B('obstacle\_left'), reverse\_rule)

agent.run\_agent()



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