

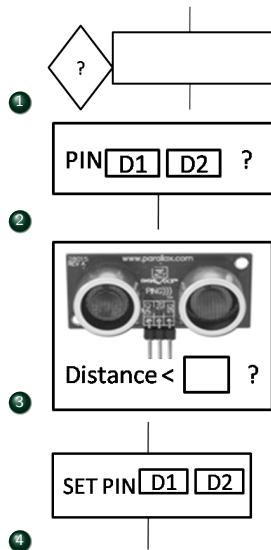
# CSEN1082: Visual Programming Example I

Nada Sharaf

Spring Semester 2019

# New Language

Consider the below language to control some parts of a new robot.



With the new language, the user should be able to:

- 1 Check the value of a pin
- 2 Check how close an object is
- 3 Set the value of a pin

D1 and D2 are drop down lists that the user can choose from. The options of D1 are: 1, 2, 3, 4, 5, 6. The options of D2 are: 1 and 0.

# Question 1

Consider that a LED is connected to PIN 2 and that PIN 3 is connected to GND. Draw a program that will light the LED once the robot has an obstacle in a range of 20 cm.

## Question 2

Propose a plausible representation of a state for the language

## Question 3

What are the transitions of the semantics for the language. You can also define any extra needed functions.

# Thank You