EMBEDDED SYSTEMS

Assignment 7

TURTLEBOT

- Write a program to remote control your TurtleBot.
  - You should be able to type commands on your laptop or host system instructing the TurtleBot to perform some action. The Raspberry Pi serves as a proxy to the TurtleBot, taking your command and issuing appropriate commands to the TurtleBot itself.
  - The client should accept the following commands:
    - Drive
    - Turn: right and left by a fixed amount
    - Turn: right and left by a programmable amount
    - Read Sensor Data: dump sensor data to your terminal
    - Goto: move to a x,y point relative to the TurtleBot's current position
      - Ex. 20,100 should move the TurtleBot right by 20 steps and forward by 100 (think of the ground as a grid)
    - Return: return to the starting position before you started executing any commands.
    - Reset: reset the starting location (for use with the return command)
  - Commit the program to your team repository under the branch assignment7-turtlebot.
  - Demonstrate with a short video.