Aria Homework 2

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Code

asn2.cpp

```
1  #include "Aria.h"
2  #include <stdio.h>
3
4  int main(int argc, char *argv[])
5  {
6          /** range and angle variables to display */
7          double range;
8          double angle;
9          char logbuff[256];
10         size_t i;
11
12         Aria::init(); // initialize Aria
13
14
15         ArArgumentParser argParser(&argc, argv); // deal with the command line
               parameters
16         argParser.loadDefaultArguments();
17
18
19         ArRobot robot; // create the robot object
20         ArRobotConnector robotConnector(&argParser, &robot); // create the
               connector
21         if(!robotConnector.connectRobot())  // connect to the robot
22         {
23           ArLog::log(ArLog::Terse, "Could not connect to the robot.");
24         }
25
26         ArSonarDevice sonar; //create the sonar object and add it to the robot
27         robot.addRangeDevice(&sonar);
28
29         robot.runAsync(true); // begin to run the robot
30
31         //run the bot long enough to get a proper value
32         for(i= 0; i<100000; i++)
33         //while(1)
34         {
35                 /** get sonar range infront of robot */
36                 range = robot.checkRangeDevicesCurrentPolar(-90,90,&angle);
37
```

```
38                  /** record the range and angle*/
39                  sprintf(logbuff,"Range: %f, Angle: %f",range,angle);
40          }
41
42          ArLog::log(ArLog::Normal,logbuff);
43
44          /* Shutdown Aria and exit */
45          Aria::shutdown();
46          Aria::exit(0);
47          return 0;
48  }
```