

```
1  /* File: compass.ch
2  *
3  * First make sure that all the linkbot joints are set to zero, it is in the
4  * two wheels two wheels configuration, and pointing North. When this program is
5  * ran it reads in the letters {N,E,S,W} in any order up to 100 times. Then the
6  * programs reads in each of these letters one at a time and has the linkbot point
7  * in that compass direction.
8  *
9  * Author: Mr. Dagler
10 */
11
12 #include <linkbot.h>
13
14 int main() {
15     CLinkbotI bot;
16     char directions[100];
17     int i;
18
19     bot.resetToZero();
20
21     printf("Enter the directions you want the linkbot to point: [N,E,S, or W] ");
22     scanf("%s", directions);
23
24     i=0;
25     while(directions[i]!=NULL) {
26         if(directions[i]=='N' || directions[i]=='n') {
27             bot.moveTo(0, NaN, 0); // points North
28         }
29         else if(directions[i]=='E' || directions[i]=='e') {
30             bot.moveTo(93, NaN, 93); // points East
31         }
32         else if(directions[i]=='S' || directions[i]=='s') {
33             bot.moveTo(186, NaN, 186); // points South
34         }
35         else if(directions[i]=='W' || directions[i]=='w') {
36             bot.moveTo(-93, NaN, -93); // points West
37         }
38         i = i+1;
39         sleep(1);
40     }
41
42     return 0;
43 }
44
45
46
```