CMSC 21 – Lectures 6 – 7 Assignment

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Writing the code for item 2 was a struggle for me. Not only that, but I admittedly had not enough time to read the slides and view the recordings for Lecture 6-7 as I had a hard time as well juggling my academics with my other commitments and duties as members of various youthled and humanitarian organizations, especially during the heat of the 2022 election season. Anyhow, I have managed to still comply with the assignment, and thankfully the code had worked just as I had hoped, albeit not perfect.

As per item 2, in which the task is to declare and initialize a road network, I defined the size of the 2d array by using a macro. Subsequently, I had to ultilize for loops in order to display the 2d array after declaring and initializing it. The printf function was then used for point location. I do have to acknowledge though, that some elements of the program's output are not executed, such as the markers A – H on the leftmost side of the expected output being nowhere to be found.

Here is the expected output:

```
В
                          [c]
                                  [D]
                                           Е
                                                            G
                                                                     н
        1
                 1
                         0
                                  0
                                           0
                                                    1
                                                            ø
                                                                     ø
                         1
                                  0
                                           0
                                                            0
                                                                     0
                                                   0
        0
                                  0
                                                            0
                                                                     ø
        а
                А
                         А
                                                   а
                                                            а
                                                                     a
        а
                0
                         а
                                                   a
                                                            а
                                                                     a
                0
                                  0
                                          0
                                                            ø
                0
                         0
                                  1
                                          0
                                                   0
                                                                     0
        0
                0
                         0
                                  0
                                           0
                                                            ø
                               0 - A, 1 - B, 2 - C, 3 - D, 4 - E, 5 - F, 6 - G, 7 - H
Which point are you located?
At point: F
Now at point A
   at point B
   at point C
         arrived to charging station
```

Here is the output of my code:

```
0
                                                 0
                                                                                                   0
                                                                                                                    0
                                                                                  0
                                0
                                                                                  0
                                                                                                   0
                                                                                                                    0
                                                                 А
                                                                                  a
                                                                                                                   a
which point are you located? 0 - A, 1 - B, 2 - C, 3 - D, 4 - E, 5 - F, 6 - G, 7 - H
At point: F
low at point A
Now at point B
Now at point C
point: C arrived to charging station
 rocess returned 0 (0x0) execution time : 0.344 s
 ress any key to continue.
```