**Lecture 6-7**
**Arrays and Multidimensional Arrays**

1. A.

```
16      bool pathway[8] = { [0] = 1, [2] = 1};
```

B.

```
16      bool pathway[8] = { 1, 0, 1 };
```

In this case, assigning values to the first three elements of the array. It is considered that unassigned value of a Boolean is false in default.

2.

1. Define the size of the matrix.
2. Initialize the matrix.
3. Using for-loop, print the column titles.
4. Using for-loop, print the matrix while printing row titles.
5. Get user input of the starting point.
6. Using if-condition, determine the accessible roads. If matrix[x][starting point] == 1, then road is True/Accessible.
7. loop stops if point arrived at charging point using conditions
8. Print the final destination point.

In finding the accessible roads or True values, it is from column to row. The checking for the True values is from the starting point (user input) to i → size of the matrix like in the assignment guide and this is called Adjacency Matrix. If matrix[x][starting point] == 1, (x is from 0 – 7) then that road is accessible and x will be the new starting point.

Github link: https://github.com/Maxinne02/Maxinne-Cahilig/tree/main/CMSC21/Lecture6-7/Assignments