Laboratory 6 Summary:

Exercise 1:

- can be solves easily, using the provided algorithm
- the find neighbors function will be modified to provide the specified order of neighbors
- dir will be initialized and updated as mentioned in the algorithm
- the last two points in the list of border points will be deleted, as they are duplicated (same as the first two)
- problems appeared due to an infinite cycle, but it was quickly solved by reading the algorithm more carefully (the stop conditions)
- the function creates a list of border points (their coordinates are important)

Exercise 2:

- the exercise can be solved by borrowing code from the previous exercise and adding the necessary modifications necessary for keeping track of the directions followed (dir pushed in a vector)
- the derivative can be computed by subtracting the current direction from the previous one; if it is negative, add 8 (if 8 neighbors) or 4 (if 4 neighbors)
- the last two codes will be deleted as they are duplicated (same as first two)

Exercise 3:

- a simple algorithm for following the given directions
- the current coordinates are held and updated each time using the given directions
- the coordinates that are obtained are used for coloring the entries of an image matrix