Cost function:
For the g function we know that the neighbors are 10.29m away in x coordinate and 7.55m away in y coordinate. So, what I have done is I have taken that as my distance.
Now we know that,
Time = Distance / Speed
So, for each terrain I imagined myself walking through it and gave integer speeds in meters/second.
Also, I have subtracted the height of the inclination (the elevation value) between the 2 pixels such that when the steepness is flat, the speed will be the speed in that terrain. But if it is an ascending of descending slope, I have assumed that we would have to walk carefully and hence will be of equally lesser pace than that of walking on the flat surface (Because you cannot just run in full speed down the hill is my assumption).
So for inclined surfaces,
Time = Distance/(Speed-Elevation)

Heuristic Function:
My heuristic function is essentially the Euclidian distance between 2 points that is sqrt((x1-x2)**2 + (y1-y2)**2). Again here I have also multiplied the x coordinate value with 10.29 and y value with 7.55 in their respective cases for effectiveness.
Since only Time can be added with Time, my heuristic function should be in Time. For that, I have taken the average value of all the speeds in all the different terrains and added that to by equation of calculation.
Avg. Time = Avg. Distance/ Avg. Speed

Seasons:

1. Summer

For summer there is no change to the file. It acts as the base case for all the other seasons. So in summer, I have used A* algorithm which uses a (heapq) heap queue to compare the f function where the f function is nothing but by g function + h function which are as explained above.

2. Fall

This season is based of the summer code only that in fall walking through the forest becomes harder, so I have decreased the speeds in all the terrains that use walking in the forest. I have used a separate dictionary to do that.

3. Winter

In winter it is estimated that walking on 7 pixels nearer to the shore of the water body is safe, so I have used a different (light blue color) for showing ice and then given a terrain cost to it and used it in the same code of the summer.

4. Spring

For spring it gets muddy in 1 meter area of the lake. Use the same code as of the summer and convert a few pixels around the lake to brown color to show mud separation then add cost for that terrain.

For making the code human readable, I have used red color to marked the path and black color to mark the goals.