Lumberjack*

Team FAB†
M.Raghavi Redyy (180010022), Purnima Priyadarshini (180010026),
Computer Science and Engineering, IIT Dharwad

November 6, 2019

Abstract

This paper describes the algorithm and heuristics followed by the program written by Team FAB for the *Lumberjack* problem listed in the online platform Optil.io.

1 Algorithms

You can have a section like this. The content of the section goes here.

1.1 algorithm-1

algorithm submitted for first evalution of the project.

- initializing the first co-ordinates (0,0)
- finding the closest point using "[x2-x1]+[y2-y1]"
- going to closest point and cutting it upwards
- this continues till the last tree

our algorithm didn't have the domino effect which was supposed to be considered. Hence, our algorithm was not accepted by Optil.io online platform.

*This is a report on the course project for the course CS211 Data Structures and Algorithms Lab

†Email IDs of team members:180010022@iitdh.ac.in, 180010026@iitdh.ac.in

1.2 algorithm-2

algorithm submitted for second and third evalutions of the project.

- initializing the first co-ordinates (0,0)
- finding the closest point using "[x2-x1]+[y2-y1]"
- going to closest point and cutting it upwards

This algorithm cuts the closest tree(only 1 tree) and terminates.

1.3 algorithm-3

algorithm submitted for fifth evalution of the project.

- initializing the first co-ordinates (0,0).
- from the input, all the unique x co-ordinate values are stored in an array xt[](in non decreasing order)
- the minimum y co-ordinates of the points whose x co-ordinates are equal are also stored in an array yt[]
- reaches the points (xt[i], yt[i]) and cut the trees upwards.