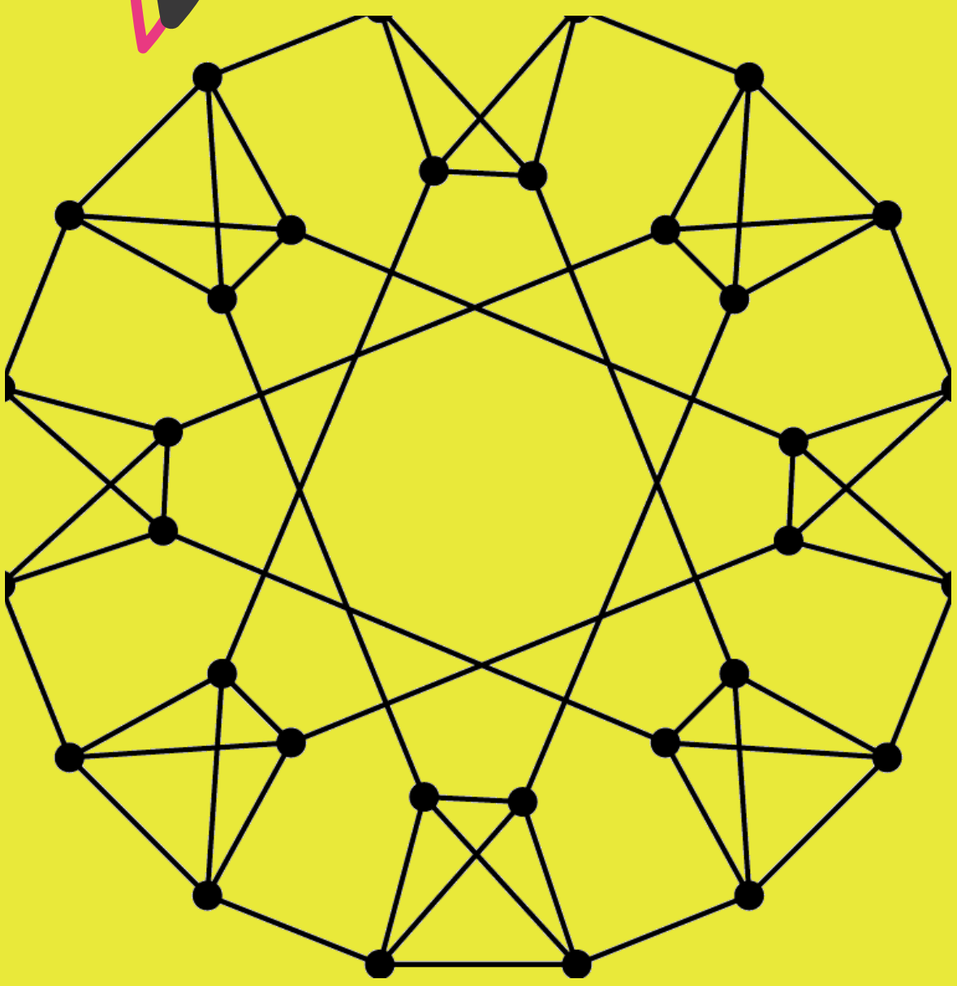
GRAPHER PROJECT

INTRODUCTION

- The aim of the project is to develop a graph application.
- In this application; user can draw, load, save a graph, and calculate R, R^2 , R^3 , ..,R^n ,R* and Rmin matrices.
- R matrix gives directly connected nodes（1 step away).
- R^2 matrix gives exactly 2 steps away points.
- R^n gives exactly n steps away points.
- R* matrix gives all connected points.
- Rmin matrix gives the minimum number of steps required for going point a to point b.



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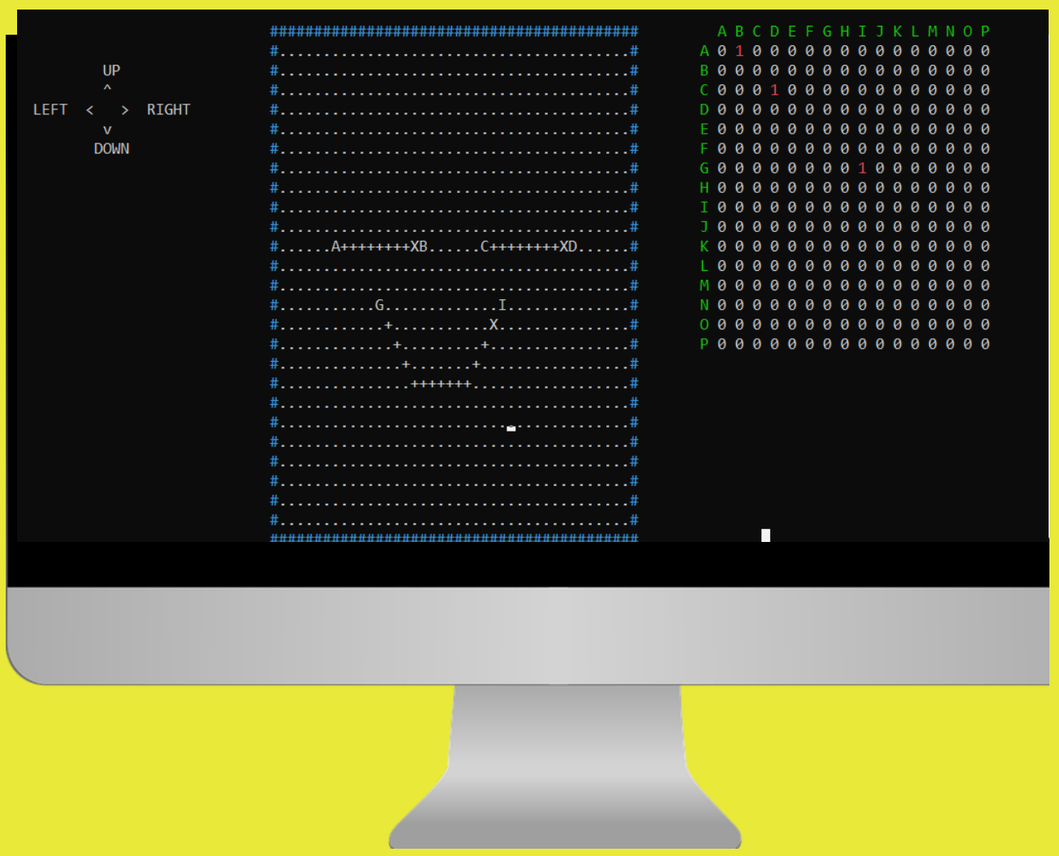
Screenshoot



Objects

- *Cursor movement keys: To move the cursor on the graph*
- *Letters A-P: Put a node to the cursor's position*
- *X : Put an ending edge part (X) to the cursor's position*
- *space : Put an edge part (+) to the cursor's position*
- *. : Delete the symbol at the cursor's position*
- *(. symbol = emptysquare)*
- *Calculation and Display Keys:*
- *1 : Trace the graph to form R relation matrix.*
- *Calculate R 2 , R 3 , ... , R n , R* and Rmin matrices.*
- *Show R matrix on the top right section of the screen.*
- *Show R* matrix on the bottom right section of the screen.*
- *2-9 : Show R^2 , R ^3 , ... or R^n matrix on the bottom right*
- *section of the screen.*
- *0 : Show R min matrix on the bottom right section of the screen*
- *Query key:*
- *Q : Takes 2 nodes (a and b), and returns min number of steps*
- *required for going node a to node b.*

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