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COT5405 Programming Assignment 2

This assignment goes over some basic sorting and shortest path algorithms.

Language: Java

Compilation Instructions:

Format of Input:

Outputs:

1. adjacency matrix

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | E | F | G | H | I |
| A | 0 | 22 | 9 | 12 | 0 | 0 | 0 | 0 | 0 |
| B | 22 | 0 | 35 | 0 | 0 | 36 | 0 | 34 | 0 |
| C | 9 | 35 | 0 | 4 | 65 | 42 | 0 | 0 | 0 |
| D | 12 | 0 | 4 | 0 | 33 | 0 | 0 | 0 | 30 |
| E | 0 | 0 | 65 | 33 | 0 | 18 | 23 | 0 | 0 |
| F | 0 | 36 | 42 | 0 | 18 | 0 | 39 | 24 | 0 |
| G | 0 | 0 | 0 | 0 | 23 | 39 | 0 | 25 | 21 |
| H | 0 | 34 | 0 | 0 | 0 | 24 | 25 | 0 | 19 |
| I | 0 | 0 | 0 | 30 | 0 | 0 | 21 | 19 | 0 |

Adjacency list

A, 22 B, 9 C, 12 D

B, 22 A, 35 C, 36 F, 34 H

C, 9 A, 35 B, 4 D, 65 E, 42 F

D, 12 A, 4 C, 33 E, 30 I

E, 65 C, 33 D, 18 F, 23 G

F, 36 B, 42 C, 18 E, 39 G, 24 H

G, 23 E, 39 F, 25 H, 21 I

H, 34 B, 24 F, 25 G, 19 I

I, 30 D, 21 G, 19 H