

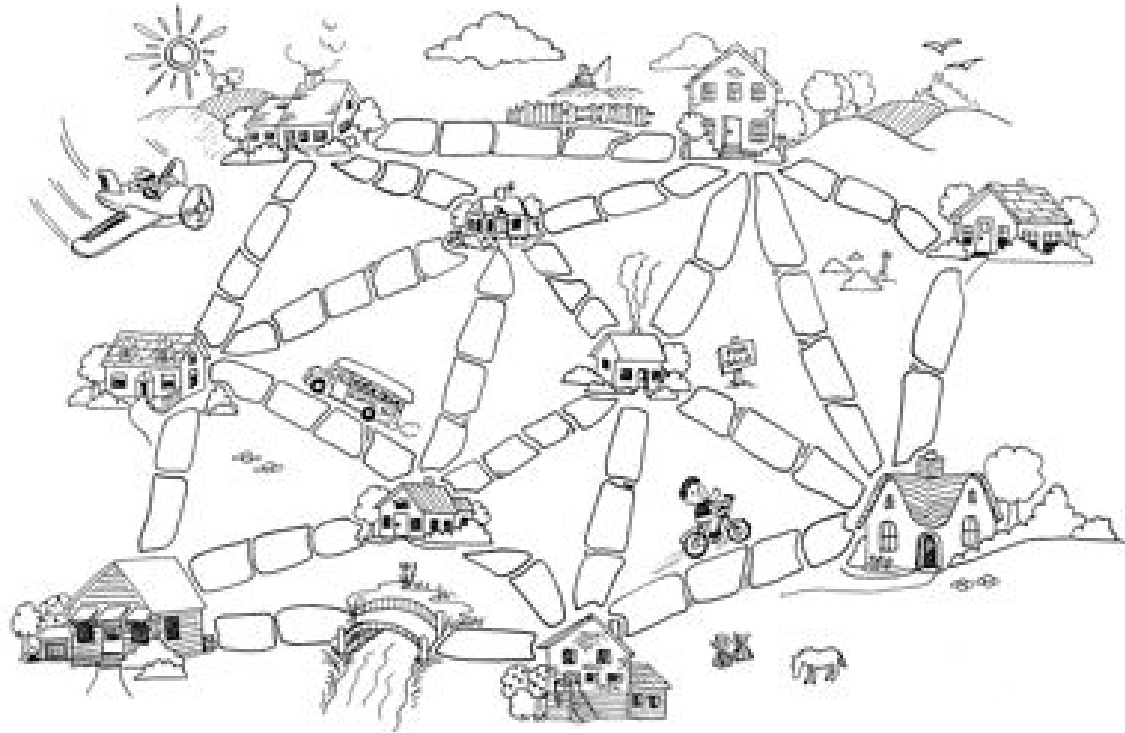
COMP20007 Design of Algorithms: Week 3

The Silk Road An ancient network

Painted wall at Khiva,
beside Al
Khwarizmi's Statue

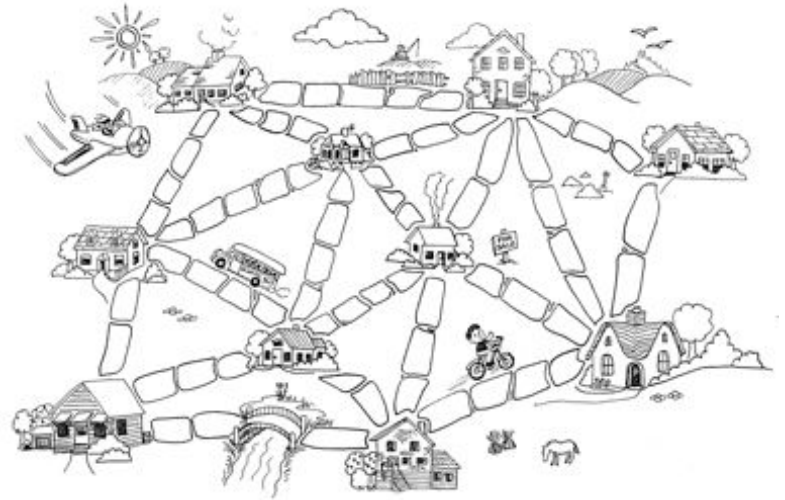


Connect the houses using the least amount of paving



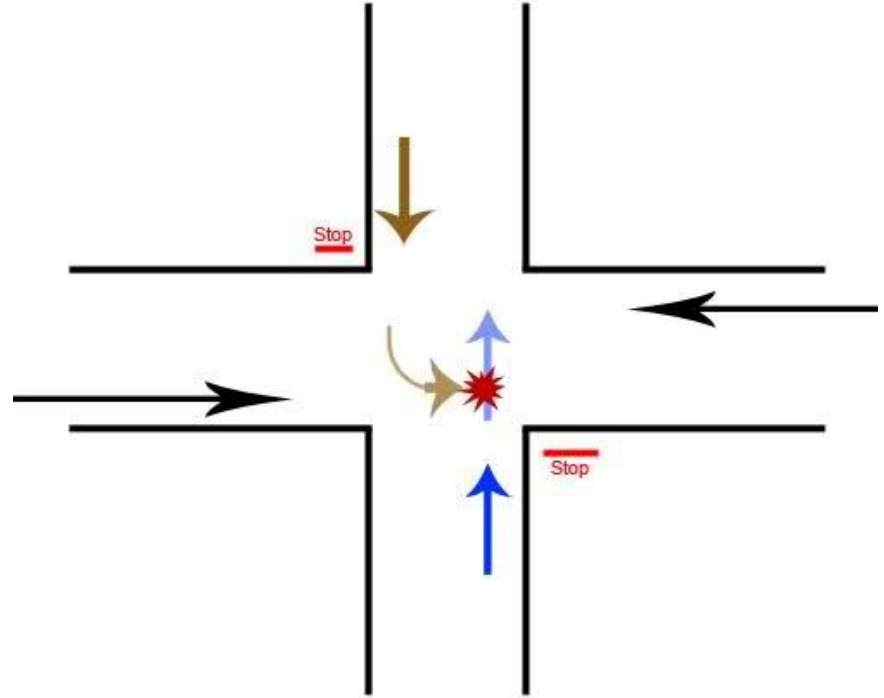
Introduction to graphs

- Representing the problem using known ADTs
- Algorithm for identifying the minimal set of connections
- Required operations
- Some applications of graphs



Modelling traffic flows

- Design an intersection
- Data structure
- Algorithm
- More graph operations
- Formal definition
- Graph operations and signatures



Reading

[DPV 3.1, 3.2](#)

