

A minimal example

Master Thesis

author

March 6, 2025

1

Theorem



There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Consider the number $q = p + 1$.
3. q is not prime, because it is divisible by p .
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.
3. $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses *reductio ad absurdum*.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

2

Simple Example

Simple Itemize

» one

» two

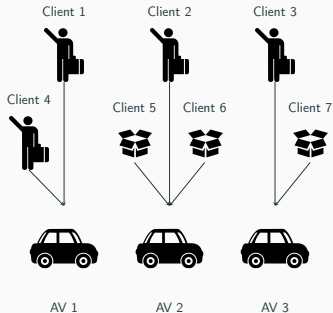
» 4

3

Example 1

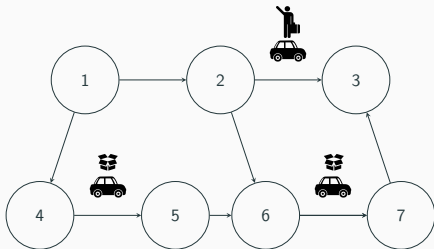
Tackling 4 Main Challenges

- » AV Dispatching
- » AV Routing
- » AV Rebalancing
- » Ride-Sharing and Delivery Pooling



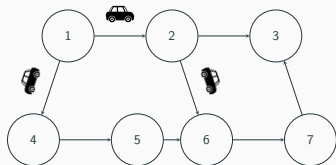
Tackling 4 Main Challenges

- » AV Dispatching
- » AV Routing
- » AV Rebalancing
- » Ride-Sharing and Delivery Pooling



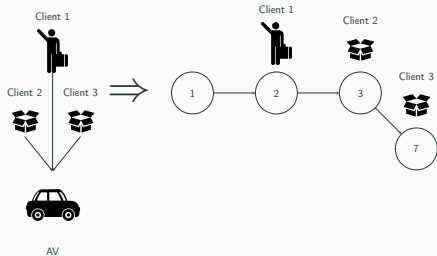
Tackling 4 Main Challenges

- » AV Dispatching
- » AV Routing
- » AV Rebalancing
- » Ride-Sharing and Delivery Pooling



Tackling 4 Main Challenges

- » AV Dispatching
- » AV Routing
- » AV Rebalancing
- » Ride-Sharing and Delivery Pooling



4

Example 2

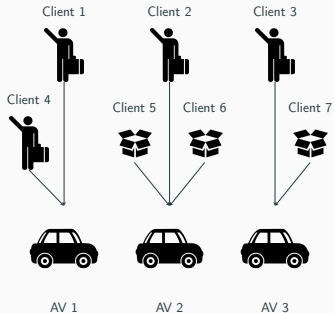
Tackling 4 Main Challenges

» AV Dispatching

»

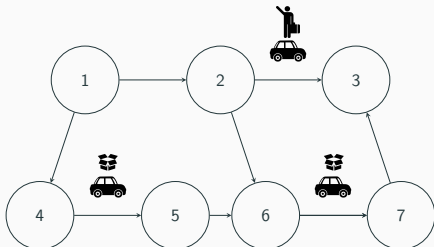
»

»



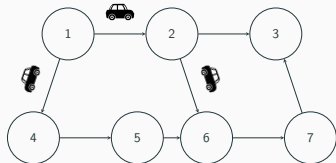
Tackling 4 Main Challenges

- » AV Dispatching
- » **AV Routing**
- »
- »



Tackling 4 Main Challenges

- » AV Dispatching
- » AV Routing
- » **AV Rebalancing**
- »



Tackling 4 Main Challenges

- » AV Dispatching
- » AV Routing
- » AV Rebalancing
- » **Ride-Sharing and Delivery Pooling**

