

# 1 Book 8.4: Resource Allocation

## 1.1 Mathematical Formulation

Given an input of

## 1.2 Solution

Important Confusing Data Structures:

- type **name** : explanation

The main functionality of

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**Algorithm 1** Method

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**procedure** NAME(..., ...)

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## 1.3 Correctness

**Proposition 1.**

*propose*

*Proof.*

Using the fact that

□

## 1.4 Analysis

For the following analysis, we will say that..

**Proposition 2.** The space complexity of this algorithm is  $O(..)$

*Proof.*

This is due to the fact that all of our data is stored in data structures:

- cause: reason  $\implies$  *complexity*

Giving us a space complexity of  $O(..)$

□

**Proposition 3.** The time complexity of this algorithm is  $O(..)$

*Proof.* This is the case because our algorithm...

Giving us a time complexity of  $O(..)$

□

## 1.5 An Example