

kreher-stinson

**Algorithms from the book implemented
in GAP**

Version 1.0

29 January 2016

**Rafael Villarroel-Flores
Citlalli Zamora-Mejía**

Rafael Villarroel-Flores Email: rvf0068@gmail.com
Homepage: <http://rvf0068.github.io>

Citlalli Zamora-Mejía Email: cizame@gmail.com

Copyright

© 2016 by Rafael Villarroel-Flores and Citlalli Zamora-Mejía

kreher-stinson package is free software; you can redistribute it and/or modify it under the terms of the [GNU General Public License](#) as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

Contents

1	Backtracking	4
1.1	Knapsack	4
	Index	5

Chapter 1

Bactracking

1.1 Knapsack

1.1.1 CheckKnapsackInput

▷ `CheckKnapsackInput(profits, weights, capacity)` (function)

Checks for valid input data for the Knapsack problems (Problems 1.1-1.4).

1.1.2 Knapsack1

▷ `Knapsack1(profits, weights, capacity)` (function)

Implementation of Algorithm 4.1.

1.1.3 Knapsack2

▷ `Knapsack2(profits, weights, capacity)` (function)

Implementation of Algorithm 4.3.

1.1.4 KSAllCliques

▷ `KSAllCliques(graph)` (function)

Implementation of Algorithm 4.4.

Index

CheckKnapsackInput, [4](#)

Knapsack1, [4](#)

Knapsack2, [4](#)

KSAllCliques, [4](#)