VIENNA UNIVERSITY OF TECHNOLOGY

184.725 High Performance Computing

TU WIEN INFORMATICS

Exercise 1

Authors: Camilo Tello Fachin 12127084

Supervisor: Prof. Dr. Jesper Larsson Träff

December 1, 2022



HPC Exercise 1



Abstract

Here documented the results of exercise 1.

Contents

1	Exercise 1 - Closed Form Expressions	1
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1
2	Exercise 2 - Graph Tree's with Canonical Numbering	1
	2.1 T_k^d with $k = 3$ and $d = 3$	
3	Exercise 3 - Planar Graph H_d	1
4	Exercise 4 - Gray Code Embedding	1
5	Exercise 5 - Inverse Gray Code	1
6	Exercise 6 -	1
7	Exercise 7 -]



1 Exercise 1 - Closed Form Expressions

- **1.1** \sum_{1}^{2}
- 1.2 \sum_{1}^{2}
- **1.3** \sum_{1}^{2}
- **1.4** \sum_{1}^{2}

2 Exercise 2 - Graph Tree's with Canonical Numbering

- $\textbf{2.1} \quad T_k^d \text{ with } k=3 \text{ and } d=3$
- **2.2** B_k^d with k = 3 and d = 4
- 3 Exercise 3 Planar Graph H_d
- 4 Exercise 4 Gray Code Embedding
- 5 Exercise 5 Inverse Gray Code
- 6 Exercise 6 -
- 7 Exercise 7 -