Balancing Act: Achieving Time and Memory Efficiency in SVP

Michal Word Count: 750

Approach

This task seemed quite daunting at first, however I very quickly became fully immersed in this challenge. My approach stemmed entirely from my initial research into the most common methods of solving SVP. The three main approaches

- Enumeration
- Sieving
- · Voronoi

Chosen Algorithm

While all of the above methods are valid ways of solving SVP they each had their own caveats.

• Enumeration is

Focus of exactness

All different combos

Accuracy

Double vs Long Double

Time & Memory

Memoisation

Delta

Overall Success

Bibliography