CMPE 365 | Algorithms I

Lab 4 and 5 Submission

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# Part 1

The code for part 1 may be found in “solution.py”.

# Part 2

The code for part 2 may be found in “modifiedSolution.py”.

***Note:*** In order to run the complete script that generates a plot the Matplotlib library would need to be installed. It will not make an error if the library is not installed

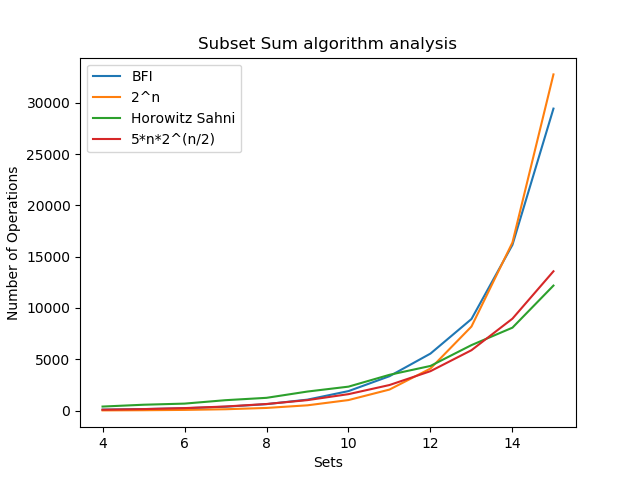


Figure 1 - Comparing the results of each of the algorithms

# Part 3

Based upon the graphed results the BFI subset algorithm follows the trend of . Additionally, the Horowitz and Sahni subset sum algorithm follows a trend of . Based upon rules of algorithm complexity the constants will drop, and the algorithm runs at the predicted complexity.