

# CS4027 Assignment 2

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## 1 Problem Statement

Obtain an algorithm for 3-Hitting Set running in time

$$2.4656^k n^{\mathcal{O}(1)}$$

using iterative compression. Generalize this algorithm to obtain an algorithm for d-Hitting Set running in time

$$((d-1) + 0.4656)^k n^{\mathcal{O}(1)}$$

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