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ABCU Program Runtime Analysis:

**Runtime Analysis:**

|  |  |  |
| --- | --- | --- |
| Cost Per Line | # Executions | Total Complexity |

Vector Pseudocode:

|  |  |  |
| --- | --- | --- |
| O(m) | n | O(n \* m) |
| O(n \* m) | 1 | O(n \* m) |

Read File/Create Course Objects:

Calculate Pre-requisites:

|  |  |  |
| --- | --- | --- |
| O(m) | n | O(n \* m) |
| O(1) | 1 | O(1) |

Hash Table Pseudocode:

Read File/Create Course Objects:

Calculate Pre-requisites:

Binary Tree Pseudocode:

|  |  |  |
| --- | --- | --- |
| O(log n) | n | O(n \* log n) |
| O(n) | 1 | O(n) |

Read File/Create Course Objects:

Calculate Pre-requisites: