**Runtime Analysis**

| **Code** | | **Line Cost** | **Number of lines** | **# Times Executes** | **Total Cost** |
| --- | --- | --- | --- | --- | --- |
| **Vector Code** | | 1 | 40 | n | n |
|  | **Total Cost** | | | | 4n + 1 |
|  | **Runtime** | | | | O(n) |

| **Code** | | **Line Cost** | **Number of lines** | **# Times Executes** | **Total Cost** |
| --- | --- | --- | --- | --- | --- |
| **Hash Table Code** | | 1 | 16 | n | n |
|  | **Total Cost** | | | | 16n + 1 |
|  | **Runtime** | | | | O(n) |

| **Code** | | **Line Cost** | **Number of lines** | **# Times Executes** | **Total Cost** |
| --- | --- | --- | --- | --- | --- |
| **BST Code** | | 1 | 51 | n | n |
|  | **Total Cost** | | | | 51n + 1 |
|  | **Runtime** | | | | O(n) |