Big O analysis (Hash Table)

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| --- | --- | --- | --- |
| Line | Line Cost | Times Executed | Total Cost |
| Declare data\_structure | 1 | 1 | 1 |
| Declare choice as integer | 1 | 1 | 1 |
| Function display\_menu | 5 | n | 5n |
| Call display\_menu | 1 | 1 | 1 |
| Input choice | 1 | 1 | 1 |
| Switch choice | 1 | 1 | 1 |
| Call load\_data | m | 1 | m |
| Call print\_course\_alphabetically | mlog(m) | n | n(m)log(m) |
| Call print\_course\_infromation | 1 | n | n |
| Exiting program | 1 | 1 | 1 |
|  |  | Total Cost | 6n+6+m+n(m)log(m) |
|  |  | Runtime | O(n(m)log(m)) |