**4. Run-Time Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| Objective | Vector (big-0 value) | Hash Table (big-0 value) | Binary Search Tree(big-0 value) |
| Load Data from File | 0(1) | 0(1) – 0(n)  (depending on collisions) | 0(log n) |
| Search for Data | 0(n) | 0(1) – 0(n)  (depending on collisions) | 0(log n) – 0(n)  (depends on tree balance) |
| Sort and Print Data | 0(n log n) | 0(n) | 0(n) |