1. Bubble sort Time Complexity :

|  |  |  |  |
| --- | --- | --- | --- |
| Test cases | Best | Average | Worst |
| 100 | 0 | 0 | 0 |
| 1000 | 0 | 0 | 0.001 |
| 10000 | 0 | 0 | 0.1250 |
| 100000 | 0.0000 | 0.0000 | 24.9230 |

1. Insertation sort Time Complexity :

|  |  |  |  |
| --- | --- | --- | --- |
| Test cases | Best | Average | Worst |
| 100 | 0.0000 | 0.0000 | 0.0000 |
| 1000 | 0.0000 | 0.0000 | 0.0000 |
| 10000 | 0.0000 | 0.0000 | 0.0430 |
| 100000 | 0.0000 | 0.001 | 8.212 |

1. Selection Sort Time Complexity :

|  |  |  |  |
| --- | --- | --- | --- |
| Test cases | Best | Average | Worst |
| 100 | 0.0000 | 0.0000 | 0.0000 |
| 1000 | 0.0000 | 0.0000 | 0.0010 |
| 10000 | 0.034 | 0.032 | 0.035 |
| 100000 | 4.551 | 12.482 | 13.174 |

1. Heap Sort Time Complexity :

|  |  |  |  |
| --- | --- | --- | --- |
| Test cases | Best | Average | Worst |
| 100 | 0 | 0 | 0 |
| 1000 | 0 | 0 | 0 |
| 10000 | 0.001 | 0.001 | 0.001 |
| 100000 | 0.012 | 0.014 | 0.011 |

|  |  |  |  |
| --- | --- | --- | --- |
| Test cases | Best | Average | Worst |
| 100 |  |  |  |
| 1000 |  |  |  |
| 10000 |  |  |  |
| 100000 |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Test cases | Best | Average | Worst |
| 100 |  |  |  |
| 1000 |  |  |  |
| 10000 |  |  |  |
| 100000 |  |  |  |