**Instructor:**

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| ● Mr. Muhammad Waseem | Registration No. 2023-CS-86  Name Huzaifa Arshad |

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| **Value of n** | **Insertion sort (seconds)** | **Merge Sort (seconds)** | **Hybrid Merge Sort (Seconds)** | **Selection**  **Sort**  **(Seconds)** | **Bubble**  **Sort**  **(Seconds)** |
| 100 | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** |
| 1000 | 0.0635 | 0.0 | 0.009 | 0.051 | 0.0975 |
| 5000 | 1.34 | 0.0253 | 0.024 | 1.009 | 2.4045 |
| 10000 | 5.284 | 0.0566 | 0.04054 | 3.7164 | 10.05 |
| 20000 | 21.761 | 0.1063 | 0.0938 | 15.135 | 39.98 |
| 30000 | 47.74 | 0.1572 | 0.163 | 33.15 | 81.37 |
| 40000 | 85.432 | 0.2038 | 0.193 | 56.147 | 143.643 |
| 50000 | 128.41 | 0.296 | 0.2343 | 91.487 | 208.280 |
| 60000 | 185.987 | 0.3987 | 0.332 | 143.6 | 335.18 |
| 100000 | 450.567 | 0.4468 | 0.553 | 380.590 | 976.23 |
| 500000 |  | 3.1236 | 2.231 |  |  |
| 1000000 |  | 6.5132 | 6.1245 |  |  |