Q1)a)

|  |  |  |  |
| --- | --- | --- | --- |
| X | Query Q1  Time (ms) | Query Q2  Time (ms) | Query Q3  Time (ms) |
| 12,500 | 764.888 | 754.118 | 1465.306 |
| 25,000 | 854.281 | 853.038 | 925.589 |
| 37,500 | 895.688 | 916.284 | 934.355 |
| 50,000 | 961.488 | 1019.868 | 1214.198 |
| 75,000 | 1063.018 | 1080.908 | 1229.531 |

b)

|  |  |  |  |
| --- | --- | --- | --- |
| work mem (kB) | Query Q1  Time (ms) | Query Q2  Time (ms) | Query Q3  Time (ms) |
| 192 | 1017.387 | 937.754 | 968.451 |
| 320 | 987.498 | 989.749 | 1017.355 |
| 576 | 1007.380 | 985.381 | 988.924 |
| 1088 | 864.386 | 873.265 | 909.227 |
| 2112 | 909.414 | 791.284 | 696.529 |
| 4160 | 902.190 | 603.568 | 691.166 |

Q2)