|  |  |  |  |
| --- | --- | --- | --- |
| Sparse Graph | | | |
| **n** | **Kruskal (ms)** | **Prim\_adj\_list (ms)** | **Prim\_adj\_mat (ms)** |
| 10 | 1 | 1 | 0 |
| 100 | 2 | 3 | 0 |
| 500 | 3 | 4 | 3 |
| 1000 | 5 | 5 | 6 |
| 1500 | 6 | 6 | 10 |
| 2000 | 9 | 6 | 16 |
| 2500 | 7 | 6 | 24 |
| 3000 | 8 | 7 | 33 |
| 3500 | 8 | 10 | 46 |
| 4000 | 9 | 9 | 59 |
| 4500 | 10 | 10 | 76 |
| 5000 | 9 | 9 | 96 |
| 10000 | 13 | 14 | 410 |
| 15000 | 20 | 20 | 927 |
| 20000 | 20 | 25 | 1616 |
| 25000 | 21 | 29 | 2485 |
| 30000 | 26 | 33 | 4293 |
| 35000 | 28 | 38 | 4957 |
| 40000 | Exception in thread "main" java.lang.OutOfMemoryError: Java heap space | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Dense Graph | | | |
| **n** | **Kruskal (ms)** | **Prim\_adj\_list (ms)** | **Prim\_adj\_mat (ms)** |
| 10 | 2 | 1 | 0 |
| 100 | 13 | 4 | 1 |
| 500 | 88 | 11 | 4 |
| 1000 | 349 | 23 | 7 |
| 1500 | 717 | 37 | 15 |
| 2000 | 1230 | 65 | 26 |
| 2500 | 1928 | 88 | 34 |
| 3000 | 2727 | 128 | 50 |
| 3500 | 4660 | 171 | 66 |
| 4000 | 5062 | 199 | 89 |
| 4500 | 5875 | 252 | 107 |
| 5000 | 7168 | 319 | 133 |
| 5500 | 12147 | 427 | 155 |
| 6000 | Exception in thread "main" java.lang.OutOfMemoryError: Java heap space | | |