ADA – LAB 9

HOMEWORK

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **File / Output (MST cost)** | **Sizes (nodes, edges)** | **Time for building graph** | **Time Prim (Distance Array)** | **Time Prim (Priority Queue - Heaps)** | **Time Kruskal (Disjoint sets)** |
| gr\_dense\_10.txt | V = 10, E = 33 | 63.6432milisec | 1.311milisec | 1.6346milisec | 1.0955milisec |
| gr\_sparse\_10.txt | V = 10, E = 33 | 57.2447milisec | 1.0757milisec | 1.4345milisec | 1.3817milisec |
| gr\_dense\_100.txt | V = 100, E = 938 | 110.9967milisec | 5.7196milisec | 3.4579milisec | 4.2671milisec |
| gr\_sparse\_100.txt | V = 100, E = 142 | 91.884milisec | 2.4411milisec | 2.5118milisec | 1.6696milisec |
| gr\_dense\_1000.txt | V = 1000, E = 90353 | 1081.4361milisec | 107.8585milisec | 67.6271milisec | 143.2431milisec |
| gr\_sparse\_1000.txt | V = 1000, E = 4431 | 153.8668milisec | 20.3959milisec | 7.9678milisec | 17.4432milisec |
| gr\_dense\_10000.txt | V = 10000, E = 989021 | 8622.4636milisec | 981.8047milisec | 406.9686milisec | 1261.8626milisec |
| gr\_sparse\_10000.txt | V = 10000, E = 44991 | 636.607milisec | 335.1322milisec | 53.9587milisec | 100.9618milisec |
| gr\_dense\_100000.txt | V = 100000, E = 499574 | 3681.5314milisec | 24706.7556milisec | 339.9493milisec | 687.0843milisec |
| gr\_sparse\_100000.txt | V = 100000, E = 149696 | 1041.8988milisec | 25578.1124milisec | 253.4413milisec | 381.8022milisec |