January 2020 CSE208: Data Structures and Algorithms II Sessional

Offline on Branch and Bound technique

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Md. Zarif Ul Alam

1705010

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name of the |  | Optimal | Exact algorithm | | BnB algorithm | |  |
| # of cities | Solution |  |
|  |  |  |  |  |
| Graph |  |  |  |  |  |  |
|  | Distance | Distance | Time (s) | Distance | Time (s) |  |
|  |  |  |
|  |  |  |  |  |  |  |  |
| data10 | 10 | 212 | 212 | 1.876 | 212 | 0.003 |  |
| data11 | 11 | 202 | 202 | 21.574 | 202 | 0.004 |  |
| data12 | 12 | 264 | 264 | 325.158 | 264 | 0.003 |  |
| data13 | 13 | 269 | N/A | N/A | 269 | 0.004 |  |
| data14 | 14 | 125 | N/A | N/A | 125 | 0.004 |  |
| data15 | 15 | 291 | N/A | N/A | 291 | 0.036 |  |
| data16 | 16 | 156 | N/A | N/A | 156 | 0.139 |  |
| data17 | 17 | 2085 | N/A | N/A | 2085 | 246.5 |  |
| data18 | 18 | 187 | N/A | N/A | 187 | 0.166 |  |
| rby1599 | 1599 | N/A | N/A | N/A | N/A | N/A |  |
| xqf131 | 131 | N/A | N/A | N/A | N/A | N/A |  |
| xqg237 | 237 | N/A | N/A | N/A | N/A | N/A |  |
| dj38 | 38 | N/A | N/A | N/A | N/A | N/A |  |
| wi29 | 29 | N/A | N/A | N/A | N/A | N/A |  |
|  |  |  |  |  |  |  |  |